LA SIERRA CHANNEL

JONES AVENUE LATERAL

HOLE AND JONES AVENUE STORM DRAINS STAGE I

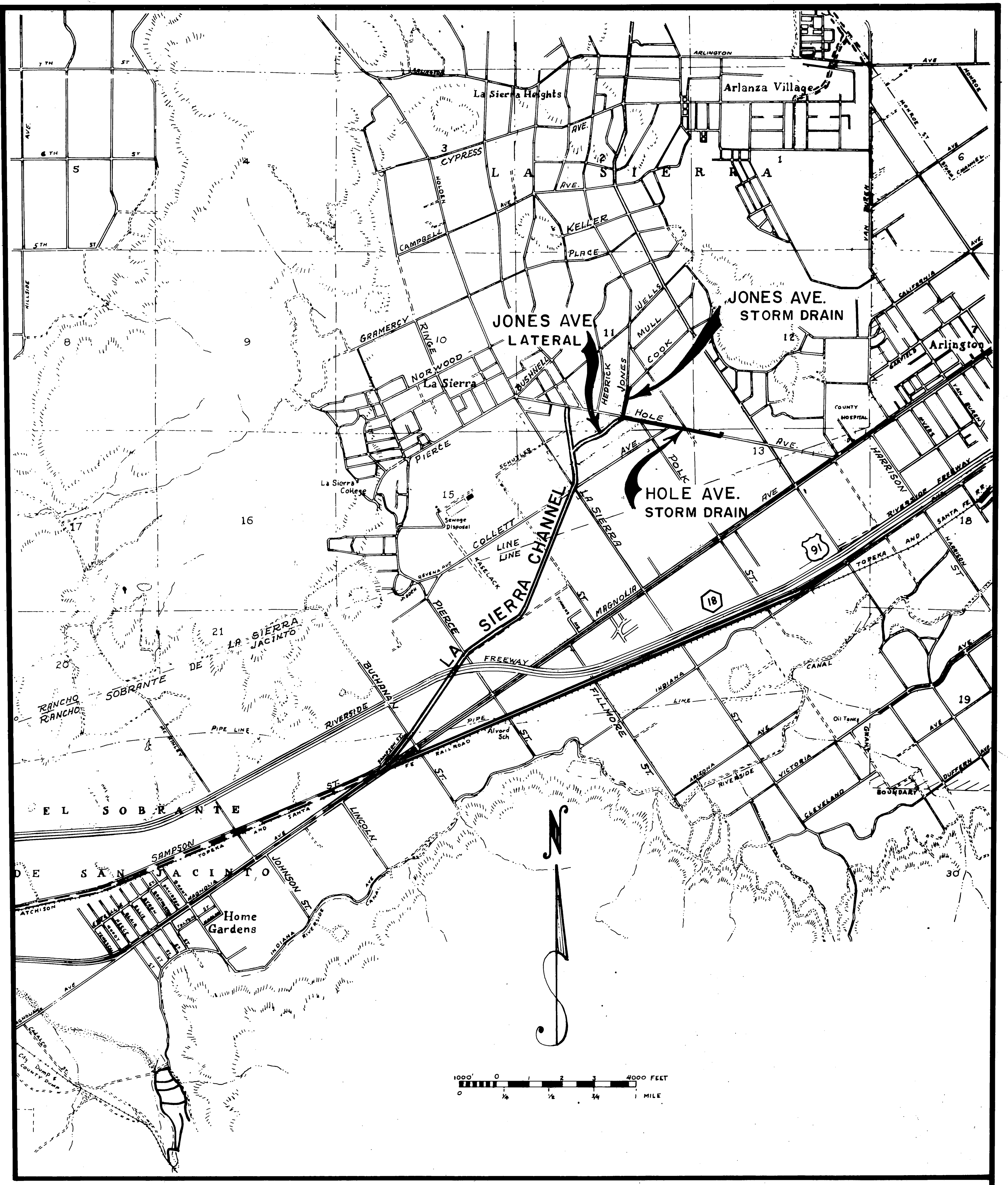
CONSTRUCTION DRAWINGS

BY

RIVERSIDE COUNTY FLOOD CONTROL

AND

WATER CONSERVATION DISTRICT



INDEXED

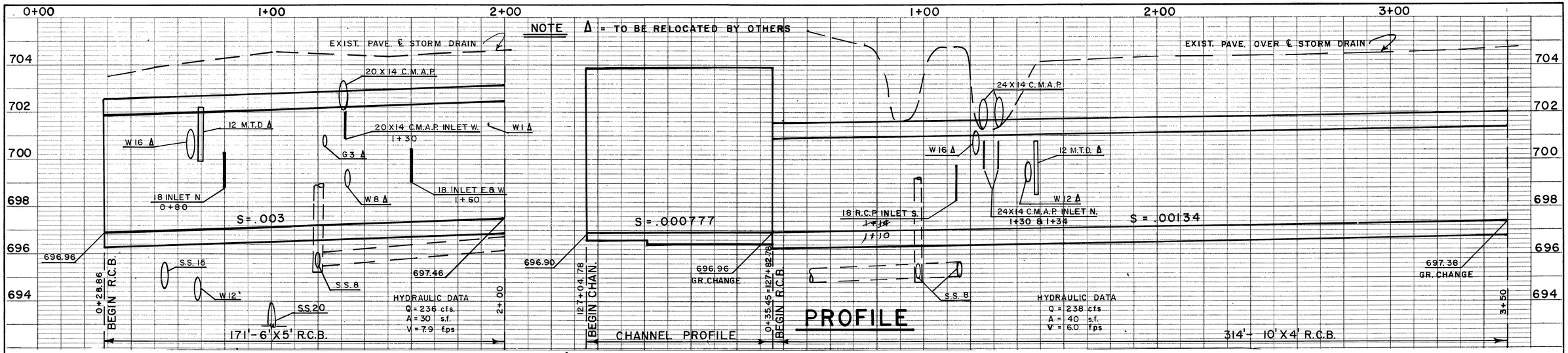
REVISED DATE	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
	LA SIERRA CHANNEL JONES AVENUE LATERAL		
	HOLE AND JONES AVENUE STORM DRAINS STAGE I		
	APPROVED: John W. Bryant, CHIEF ENGINEER R.E. NO. 8822	DRAWN: Ken Bilodeau	1 of 15 SHEET NO.
		TRACED: " "	
		CHECKED: D. M. Mann	DWG. NO. 1-221
	DATE: 3-22-68	DATE DRAWN:	

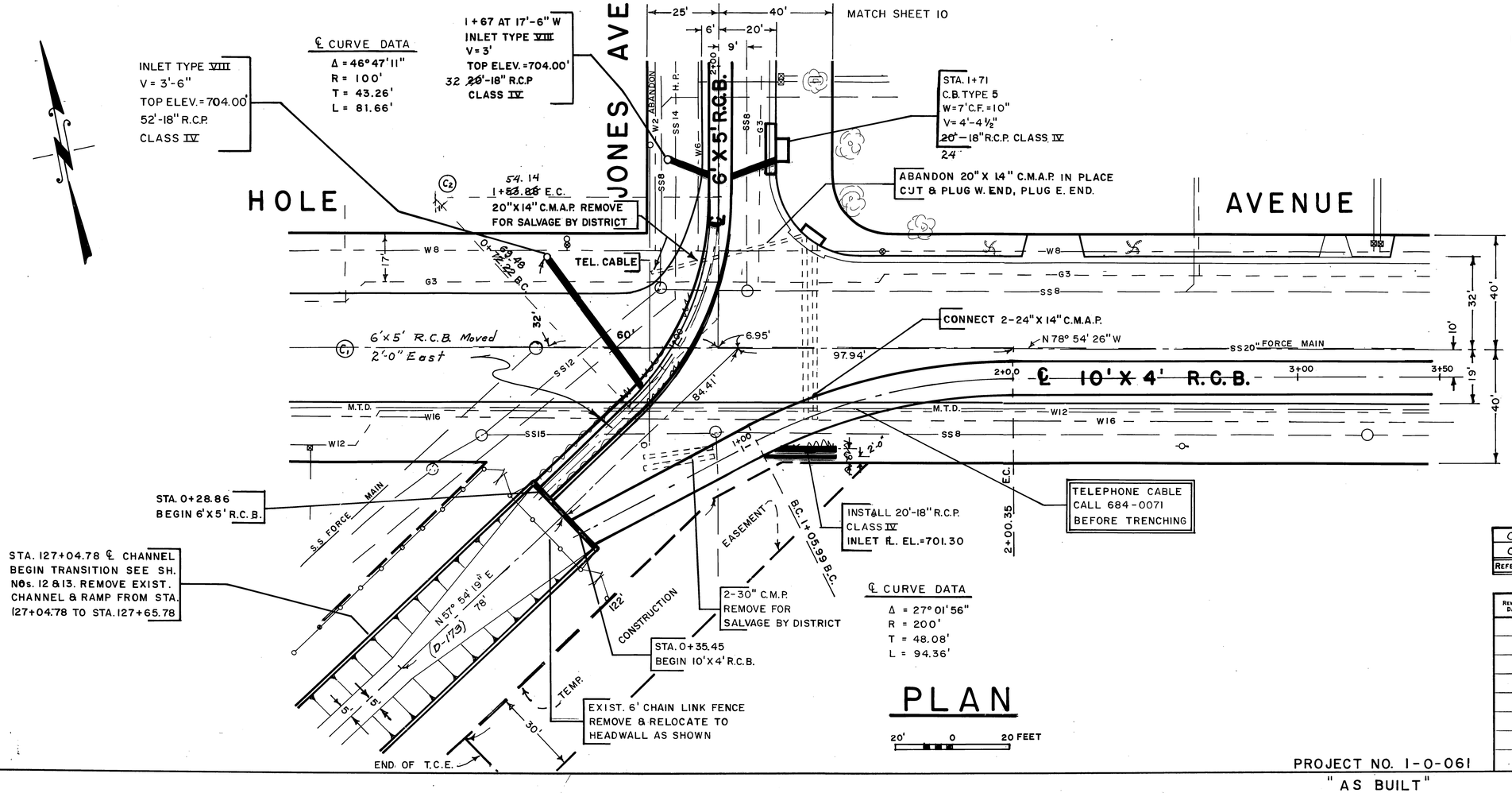
PROJECT NO. 1-0-061

"AS BUILT"

D-211

NOTE Δ = TO BE RELOCATED BY OTHERS





PLAN

20' 0 20 FEET

NOTE : EXISTING C.M.P. TO BE PLUGGED SHALL BE PLUGGED WITH CLASS B CONCRETE WITH A MINIMUM THICKNESS OF 6 INCHES.

NEW INSTALLED PIPE TO BE PLUGGED SHALL BE PLUGGED WITH A BRICK AND MORTAR WALL., 8 INCHES DEEP.

REFERENCE	DESCRIPTION	APPROVED	DATE
C1	Relocate R.C.B.		4-24-70
C2	-Station R.C.P. Changes		4-24-70

— REVISIONS —

REVISED DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL
JONES AVENUE LATERAL
HOLE AND JONES AVENUE STORM DRAINS STAGE II

APPROVED: John W. Bryant CHIEF ENGINEER R.E. NO. 9822
DATE: 3-22-68

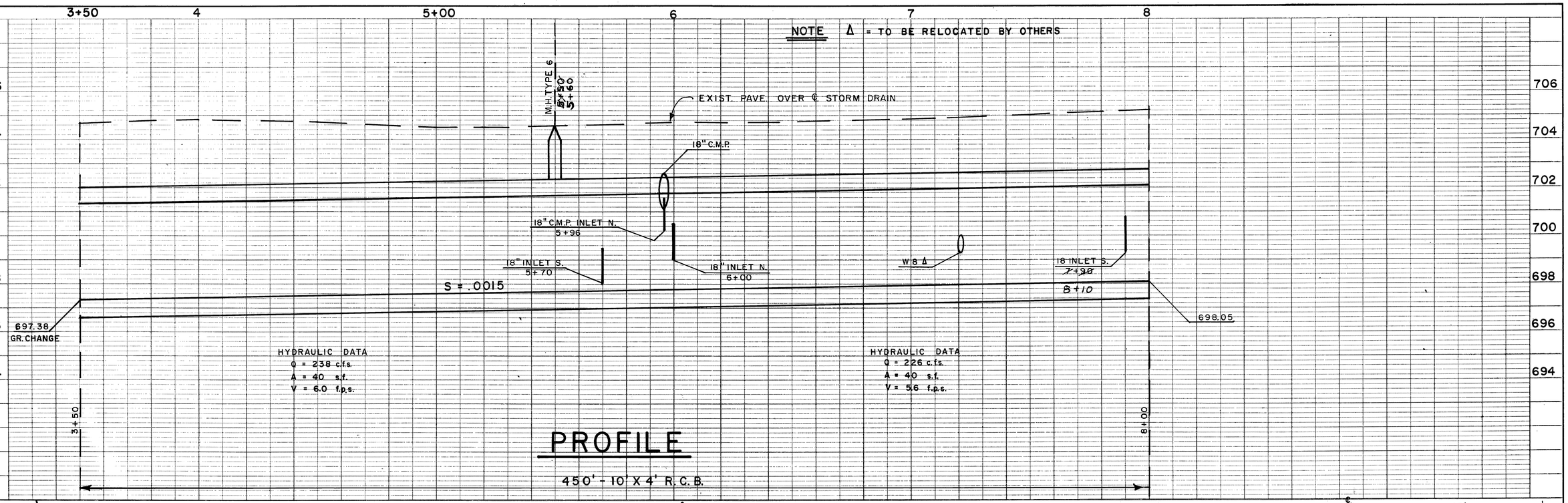
DRAWN: Jack Hansom
TRACED: Ken Bilodeau
CHECKED:
DATE DRAWN: June 1967

SHEET NO. 2 of 15
DWG. NO. 1-221

PROJECT NO. 1-0-061
"AS BUILT"

D-211

NOTE Δ = TO BE RELOCATED BY OTHERS



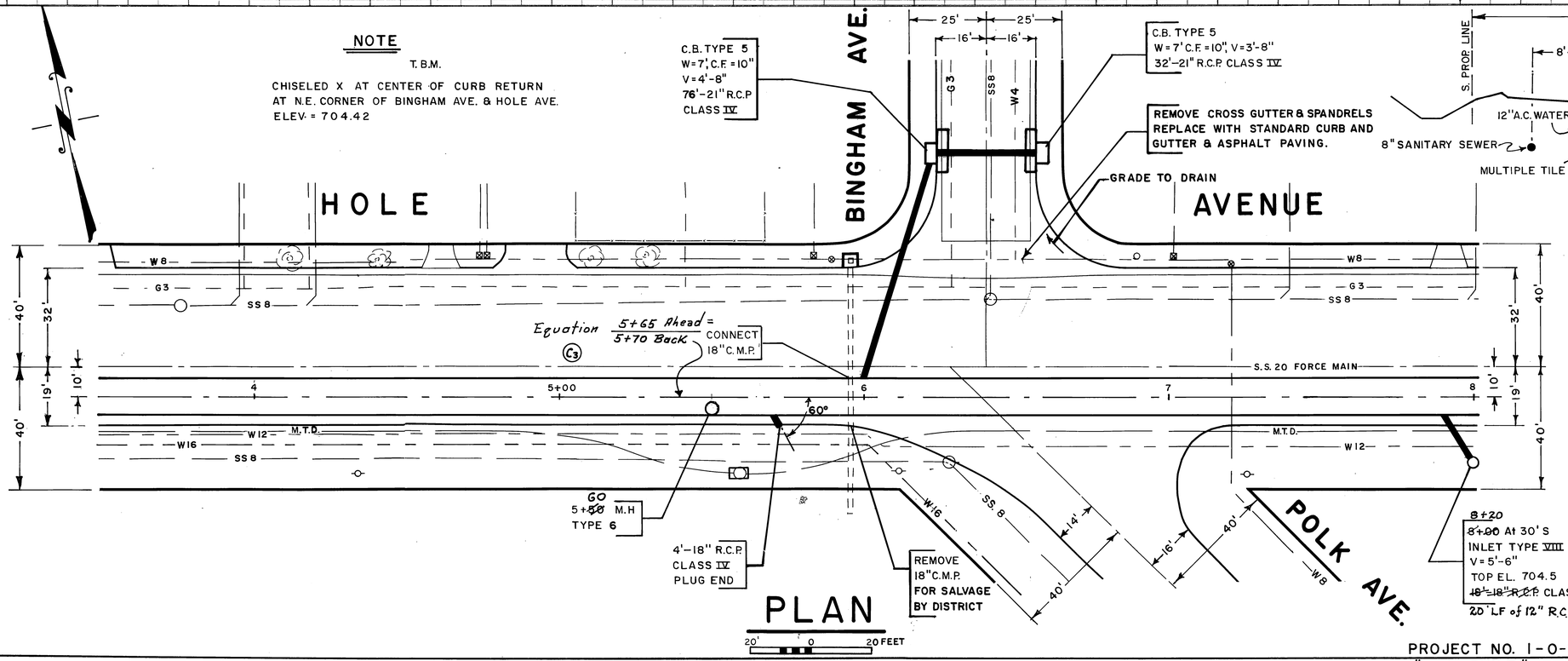
PROFILE

450' - 10' X 4' R.C.B.

NOTE

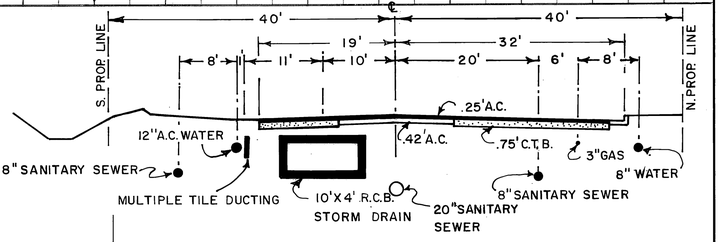
T. B.M.

CHISELED X AT CENTER OF CURB RETURN AT N.E. CORNER OF BINGHAM AVE. & HOLE AVE. ELEV. = 704.42



PLAN

20' 0 20 FEET



CROSS SECTION

STA. 4+00

10 0 10 FEET

REFERENCE	DESCRIPTION	APPROVED	DATE
C3	EQUATION		4-24-70
C4	Station & R.C.P. Changes		4-24-70

— REVISIONS —

REVISED DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL
JONES AVENUE LATERAL

HOLE AND JONES AVENUE STORM DRAINS STAGE II

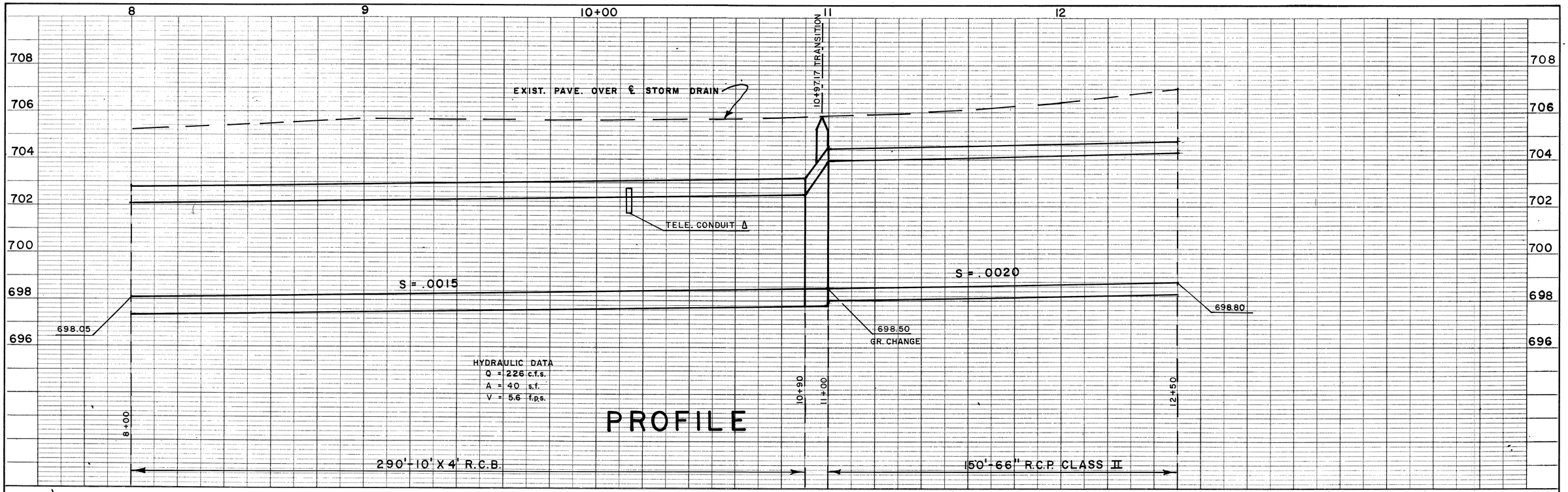
APPROVED: John H. Bryant, CHIEF ENGINEER R.E. NO. 8022
DATE: 3-22-68

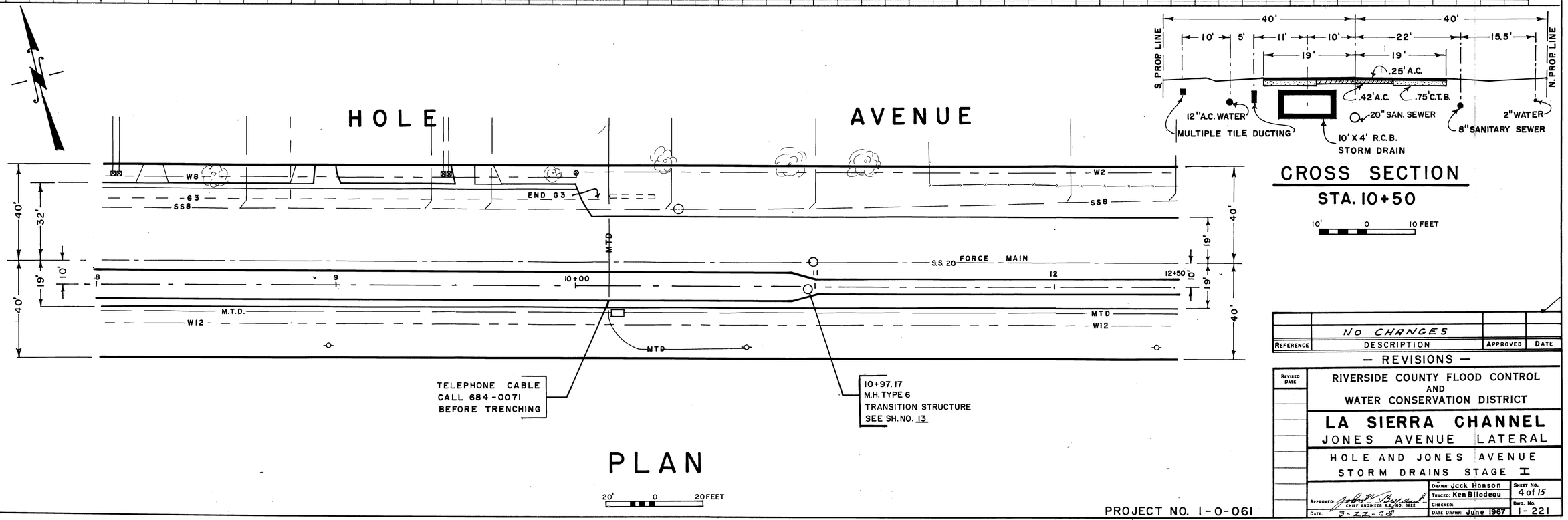
DRAWN: Jack Hanson
TRACED: Ken Bilodeau
CHECKED:
DATE DRAWN: June 1967

SHEET NO. 3 of 15
DWG. NO. 1-221

PROJECT NO. 1-0-061
" AS BUILT "

D-211





CROSS SECTION
STA. 10+50

10' 0 10 FEET

REFERENCE	DESCRIPTION	APPROVED	DATE
	NO CHANGES		

— REVISIONS —

REVISED DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL
JONES AVENUE LATERAL

HOLE AND JONES AVENUE STORM DRAINS STAGE I

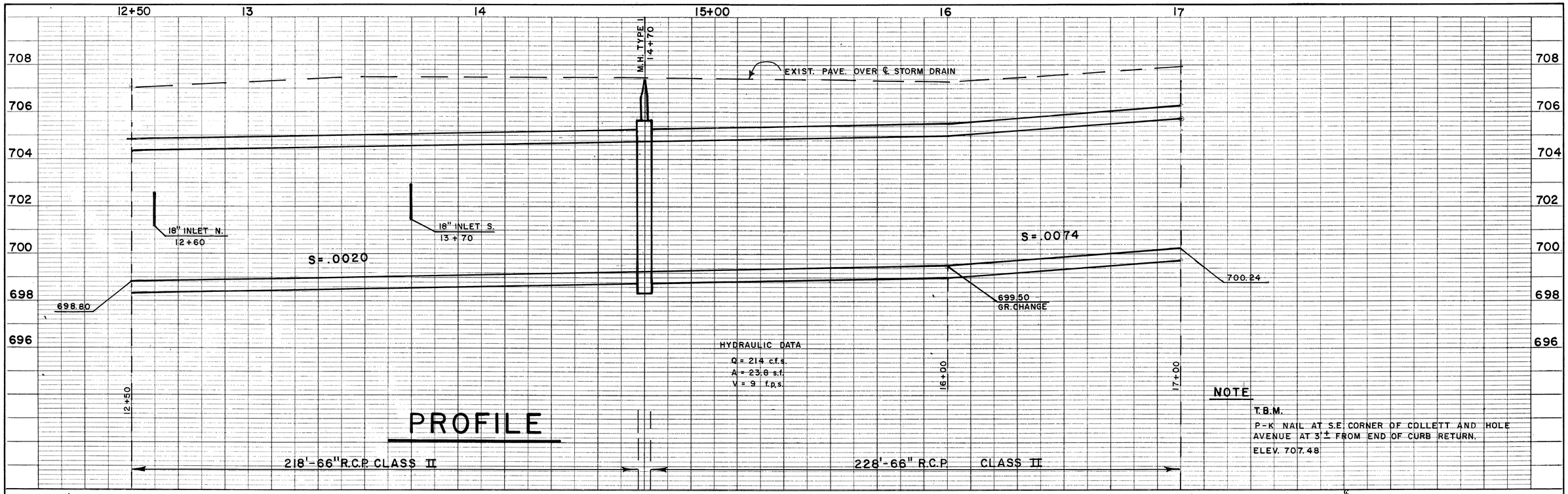
APPROVED: John P. Byrne, CHIEF ENGINEER R.E. No. 5822
DATE: 3-22-68

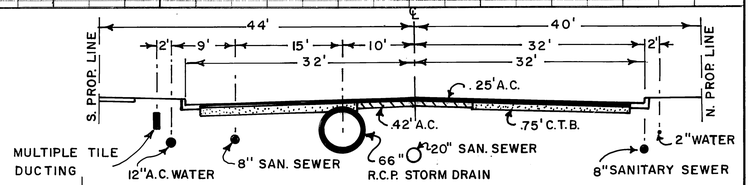
DRAWN: Jack Hanson
TRACED: Ken Bilodeau
CHECKED:
DATE DRAWN: June 1967

SHEET NO. 4 of 15
DWG. NO. 1-221

PROJECT NO. 1-0-061
"AS BUILT"

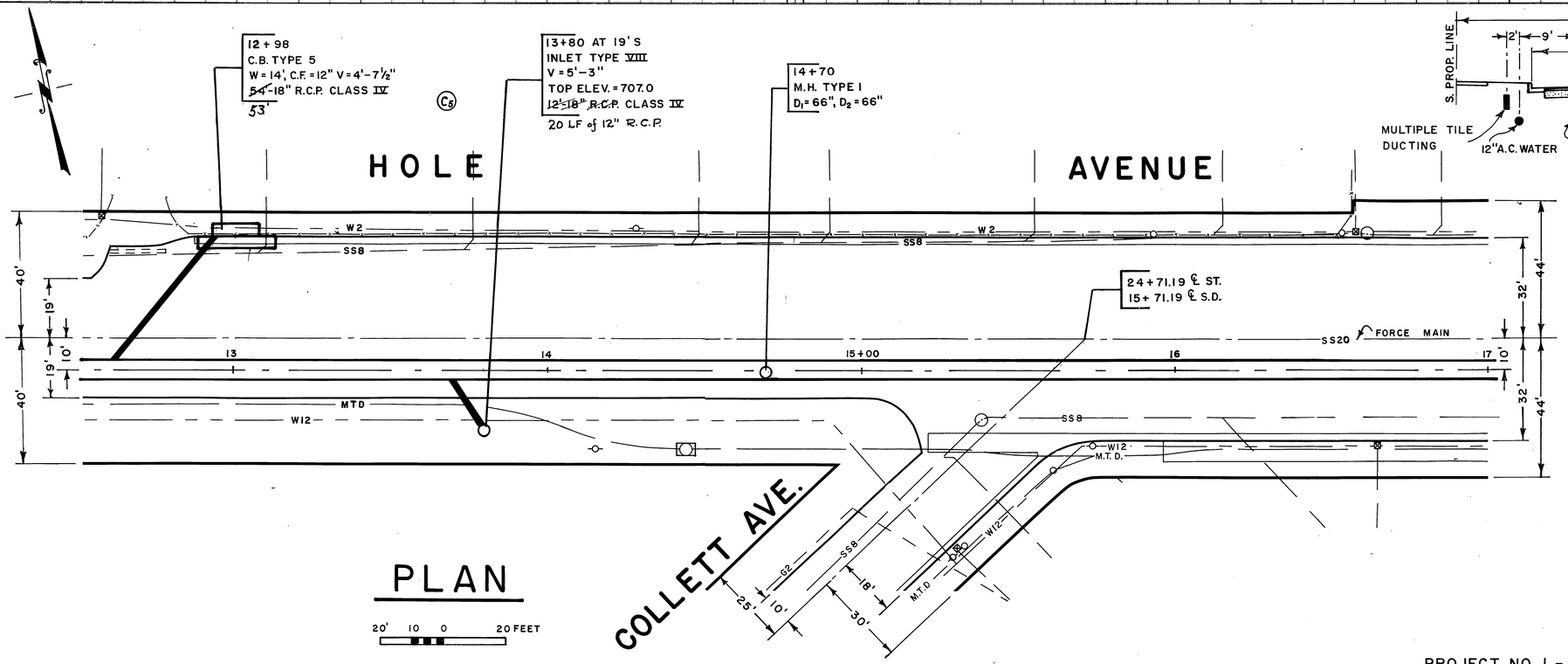
D-211





CROSS SECTION
STA. 16+00

10' 0' 10 FEET



PLAN

Reference	Description	Approved	Date
C5	Station ℄ R.C.P. Changes		4-24-68

— REVISIONS —

Revised Date

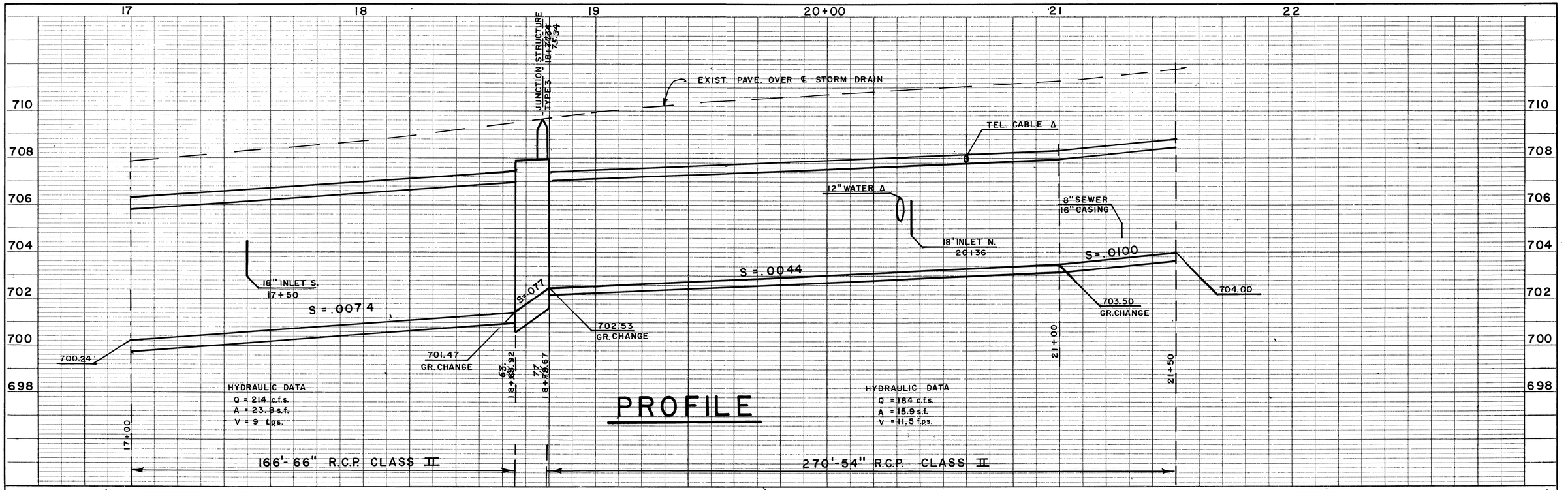
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL
JONES AVENUE LATERAL
HOLE AND JONES AVENUE STORM DRAINS STAGE I

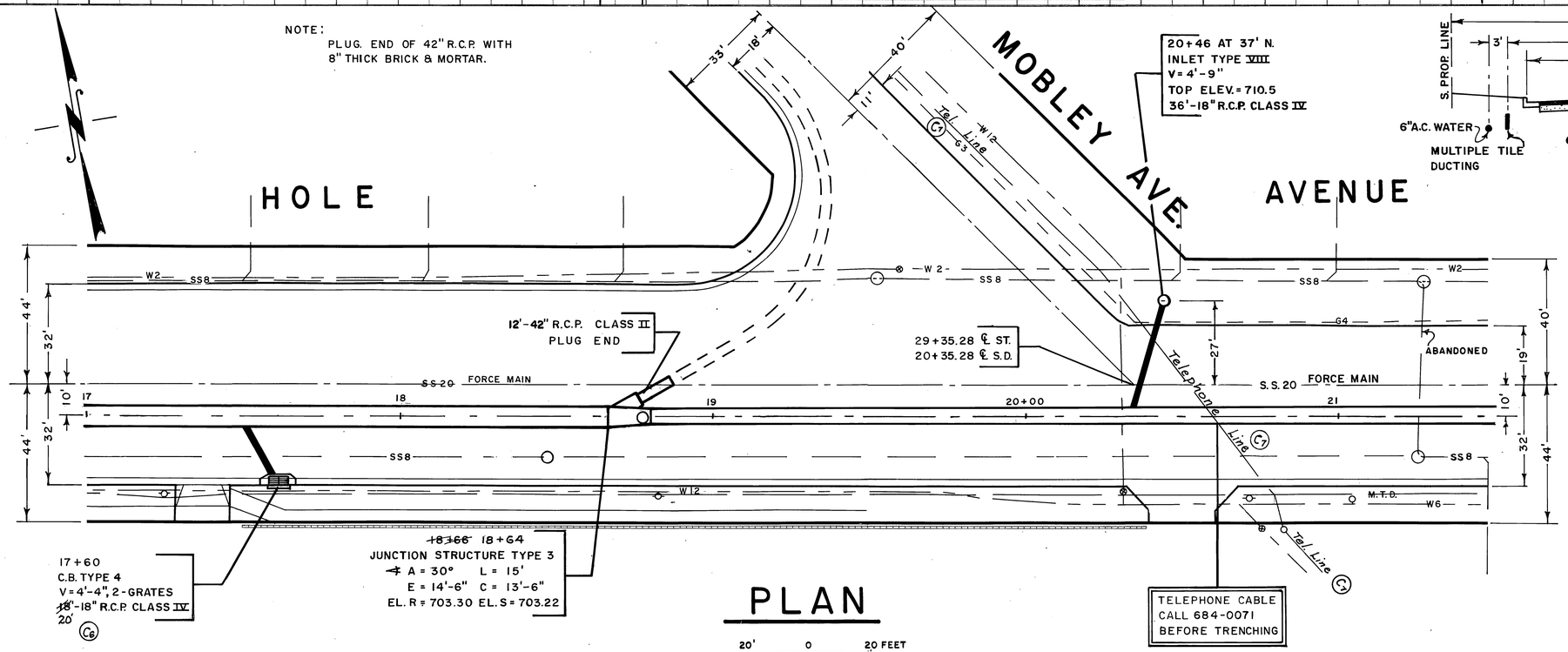
Approved: John K. Bryant, Chief Engineer, R.E. No. 5022	Drawn: Jack Hanson	Sheet No.	5 of 15
Date: 3-22-68	Traced: Ken Biladeau	Dwg. No.	1-221
	Checked:		
	Date Drawn: June 1967		

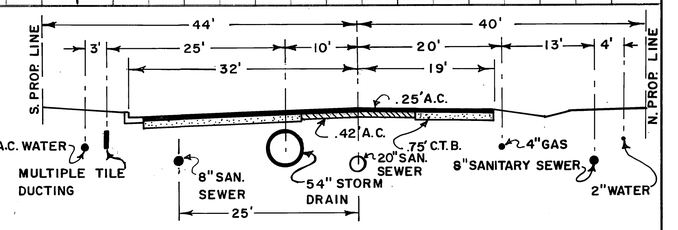
PROJECT NO. 1-0-061
"AS BUILT"

D-211



NOTE:
PLUG END OF 42" R.C.P. WITH
8" THICK BRICK & MORTAR.





CROSS SECTION
STA. 21+00

10 0 10 FEET

Reference	Description	Approved	Date
C6	Station & R.C.P Changes	JAV	4-24-70
C7	Label Telephone Line		

— REVISIONS —

Revised Date	
	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
	LA SIERRA CHANNEL
	JONES AVENUE LATERAL
	HOLE AND JONES AVENUE STORM DRAINS STAGE I

Approved: John M. Bryant, Chief Engineer R.E. No. 8925
Date: 3-22-68

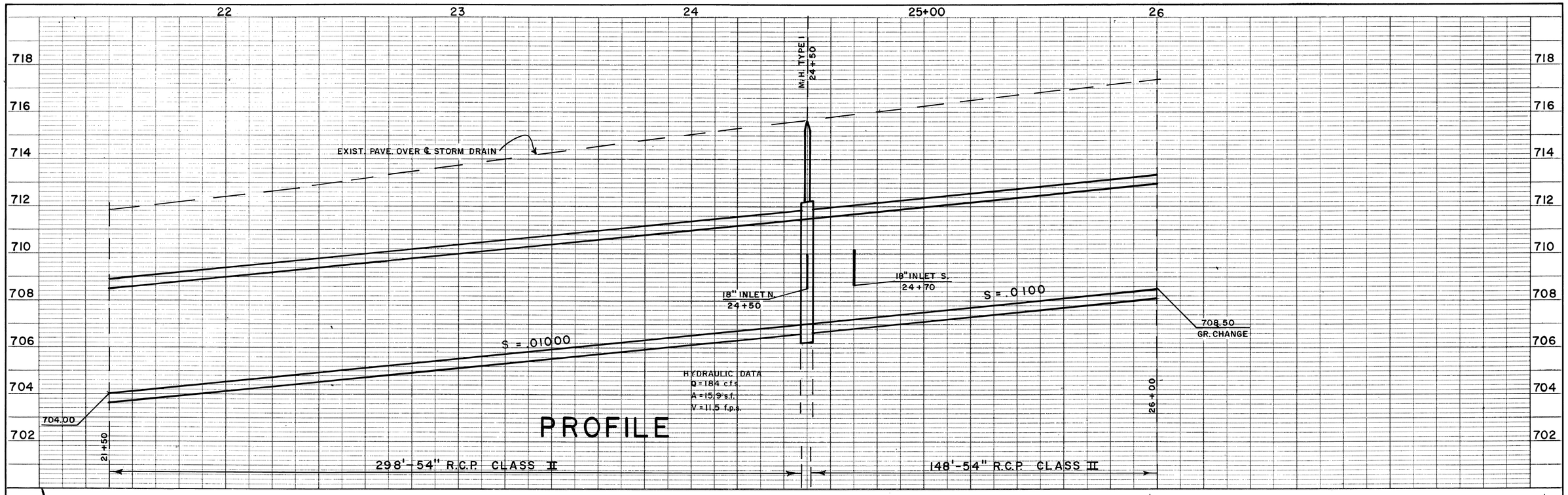
Drawn: Jack Hanson
Traced: Ken Bilodeau
Checked:
Date Drawn: June 1967

Sheet No. 6 of 15
Dwg. No. 1-221

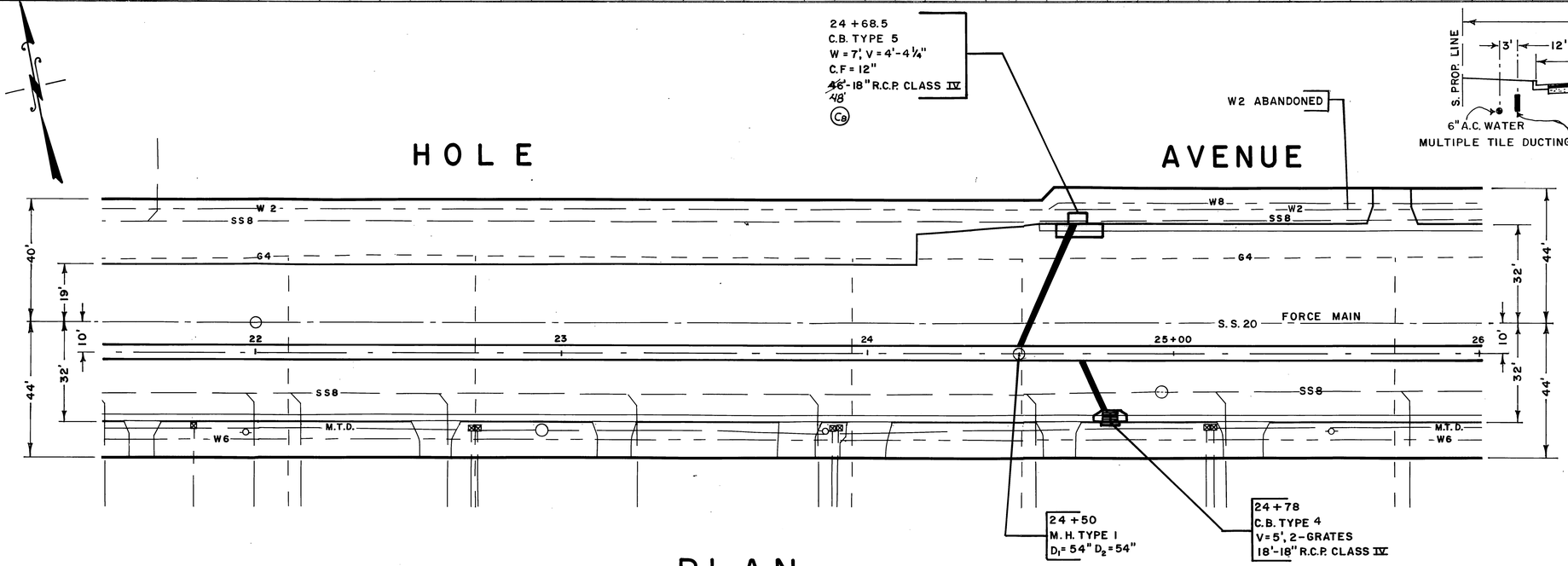
PROJECT NO. 1-0-061
" AS BUILT "

D-211

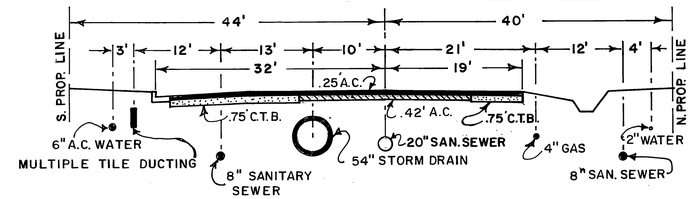
PROFILE



PLAN



CROSS SECTION
STA. 23+50



10' 0 10 FEET

Reference	Description	Approved	Date
C8	R.C.P. Change	JCW	4-24-70

— REVISIONS —

Revised Date

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL
JONES AVENUE LATERAL

HOLE AND JONES AVENUE STORM DRAINS STAGE II

Approved: John K. Bryant, Chief Engineer R.E. No. 6882
Date: 3-22-68

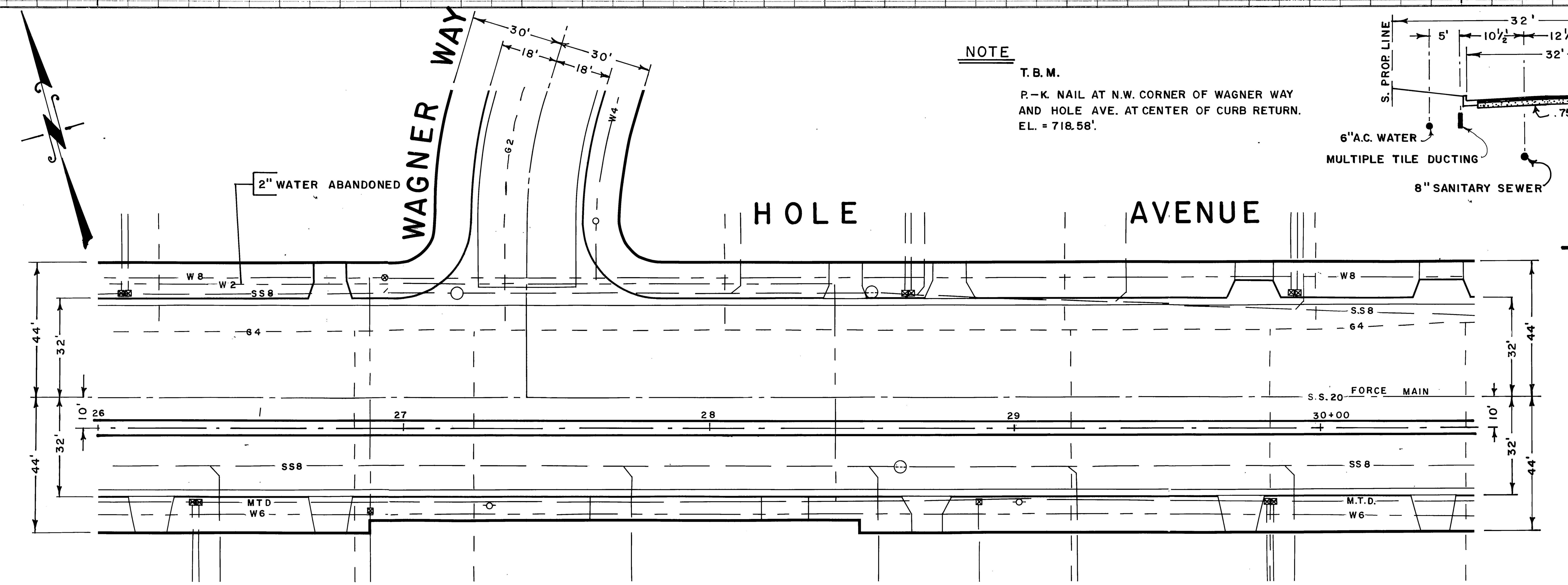
Drawn: Jack Hanson
Traced: Ken Biladeau
Checked:
Date Drawn: June 1967

Sheet No. 7 of 15
Dwg. No. 1-221

PROJECT NO. 1-0-061
"AS BUILT"

D-211

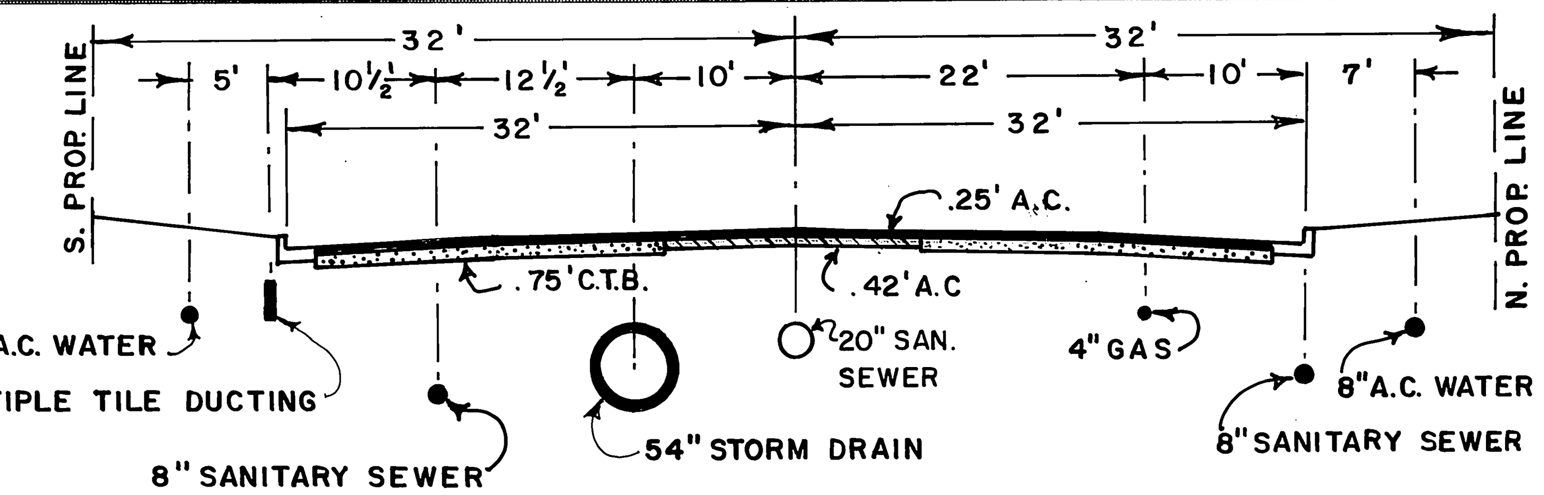
PROFILE



NOTE

T. B. M.

P.-K. NAIL AT N.W. CORNER OF WAGNER WAY AND HOLE AVE. AT CENTER OF CURB RETURN. EL. = 718.58'.



CROSS SECTION

STA. 29+00

10' 0 10 FEET

PLAN

20' 0 20 FEET

Reference	Description	Approved	Date
	No Changes		

— REVISIONS —

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL
JONES AVENUE LATERAL
HOLE AND JONES AVENUE STORM DRAINS STAGE I

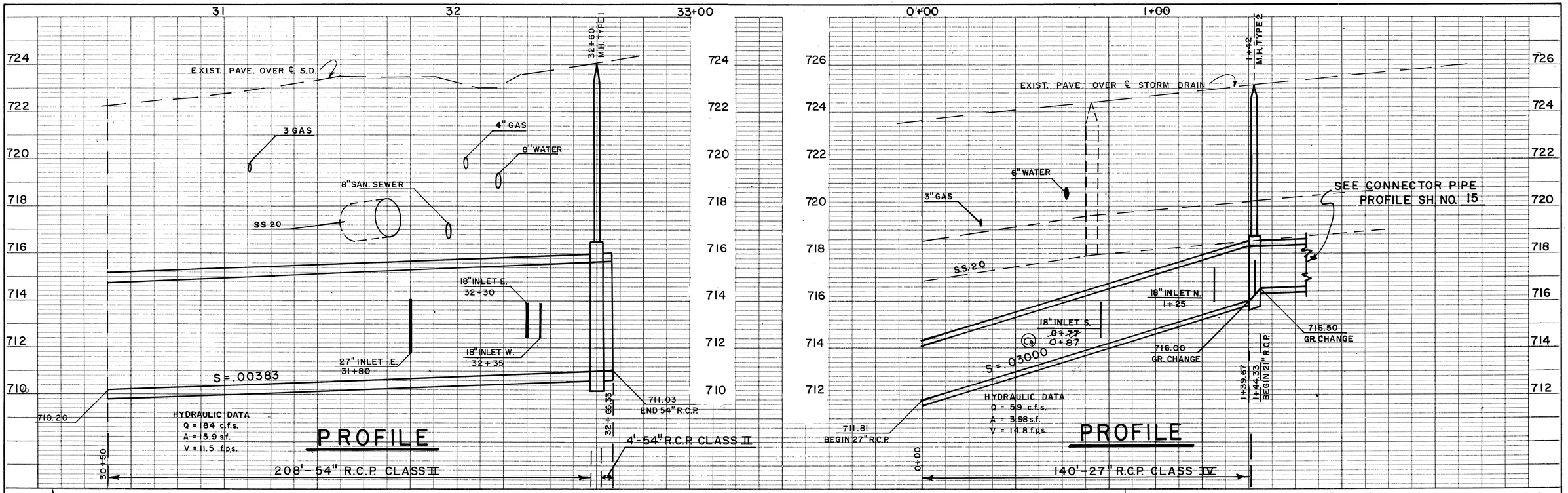
Drawn: Jack Hanson
Traced: Ken Bilodeau
Checked:
Date Drawn: June 1967
Sheet No. 8 of 15
Dwg. No. 1-221

Approved: John W. Bryant, Chief Engineer R.E. No. 5023
Date: 3-22-68

PROJECT NO. 1-0-061

"AS BUILT"

D-211



REFERENCE	DESCRIPTION	APPROVED	DATE
C9	Station, R.C.P., V depth Change	[signature]	4-24-70

— REVISIONS —

REVISED DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL
JONES AVENUE LATERAL

HOLE AND JONES AVENUE STORM DRAINS STAGE I

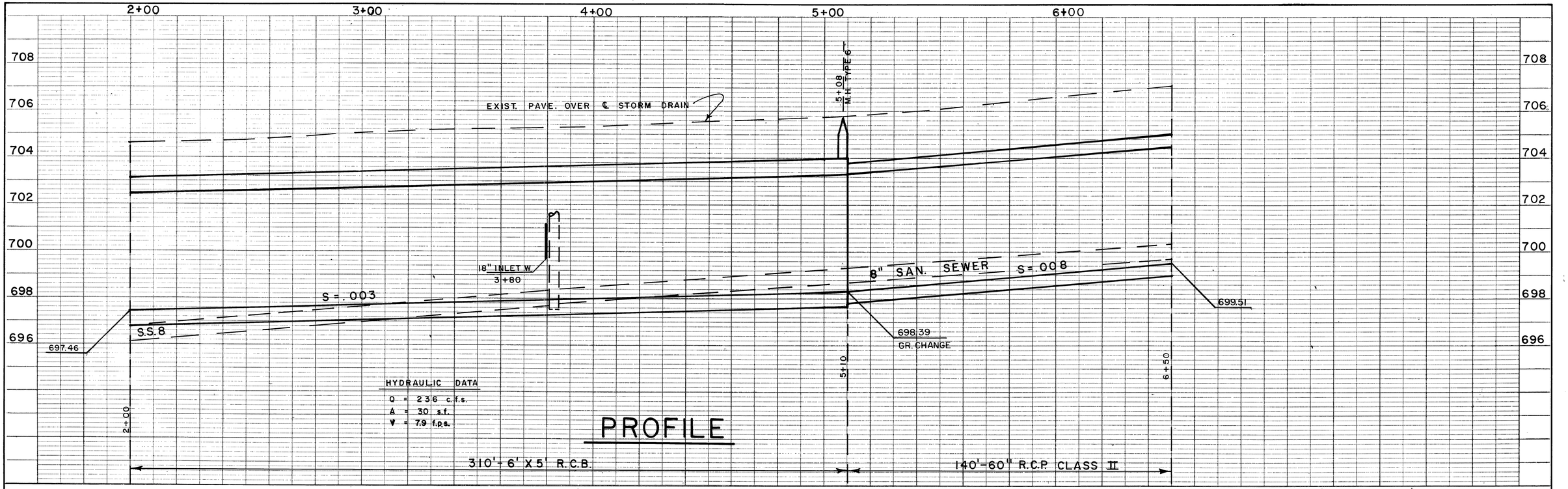
APPROVED: [signature] CHIEF ENGINEER R.E. NO. 8822
DATE: 3-22-68

DRAWN: Jack Hanson
TRACED: Ken Bilodeau
CHECKED:
DATE DRAWN: June 1967

SHEET NO. 9 of 15
DWG. NO. 1-221

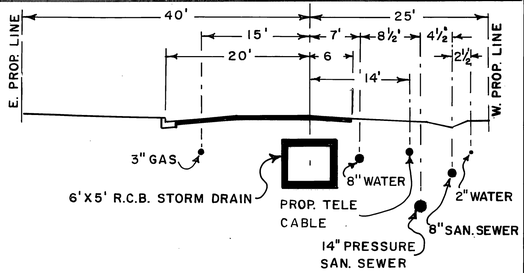
PROJECT NO. 1-0-061
"AS BUILT"

D-211

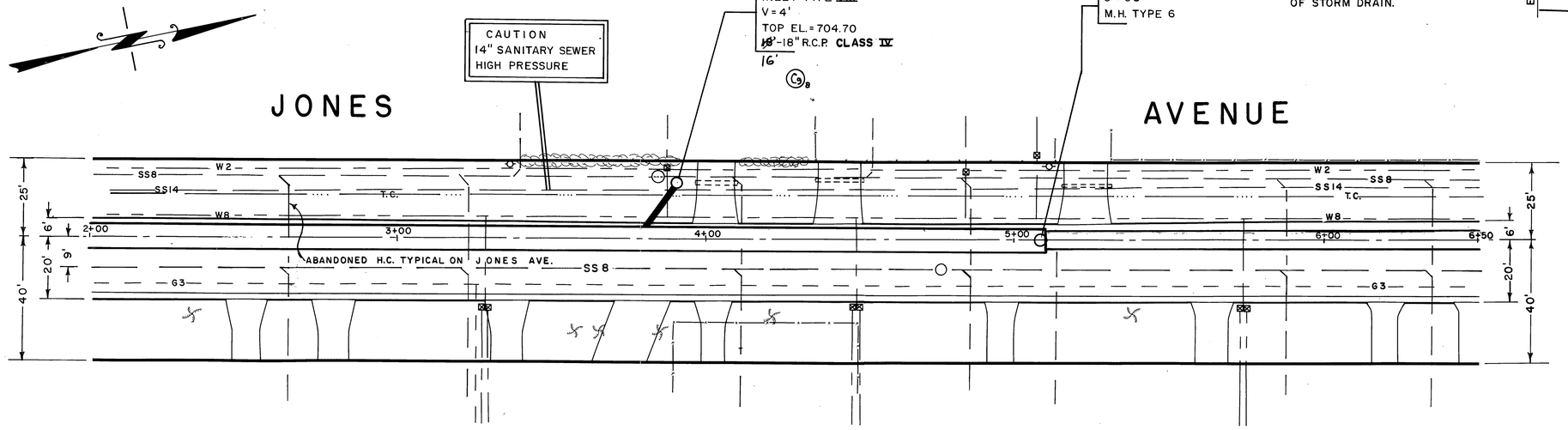


PROFILE

NOTE:
ALL SANITARY SEWER HOUSE CONNECTIONS. TO EAST SHALL BE PLUGGED ON WEST SIDE OF STORM DRAIN.



CROSS SECTION
STA. 3+00
10 0 10 FEET



MATCH SHEET NO. 2

PLAN
20' 0 20 FEET

PROJECT NO. 1-0-061
"AS BUILT"

REFERENCE	DESCRIPTION	APPROVED	DATE
C9 a	Change in Pipe Length		4-24-70

— REVISIONS —

REVISED DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

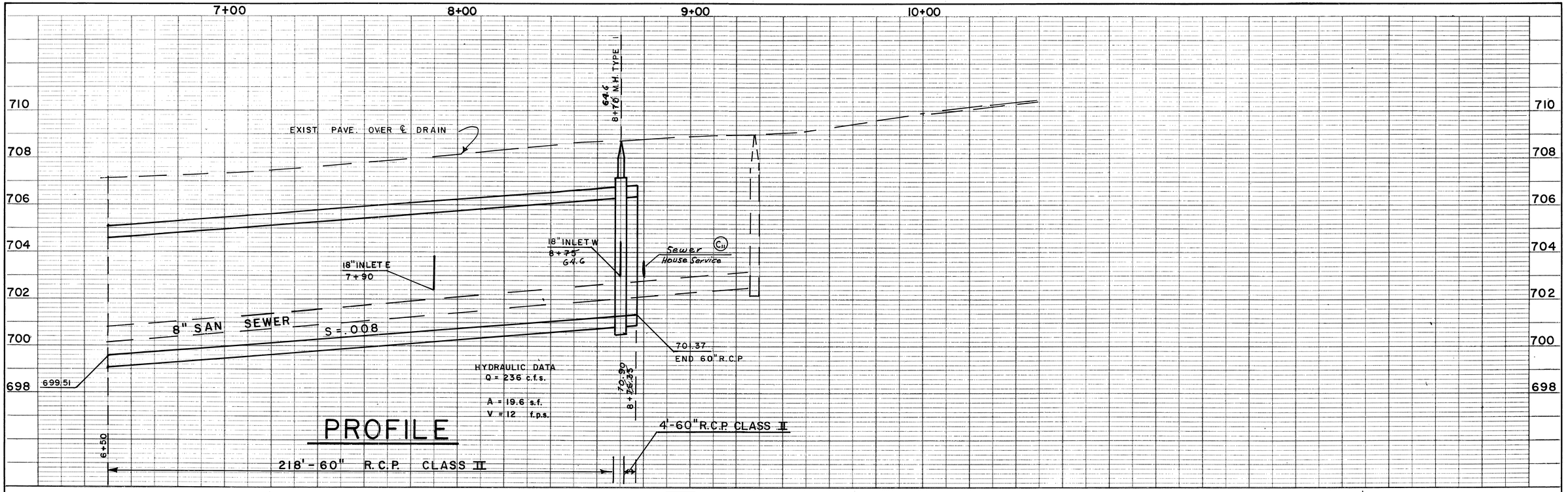
LA SIERRA CHANNEL
JONES AVENUE LATERAL
HOLE AND JONES AVENUE STORM DRAINS STAGE I

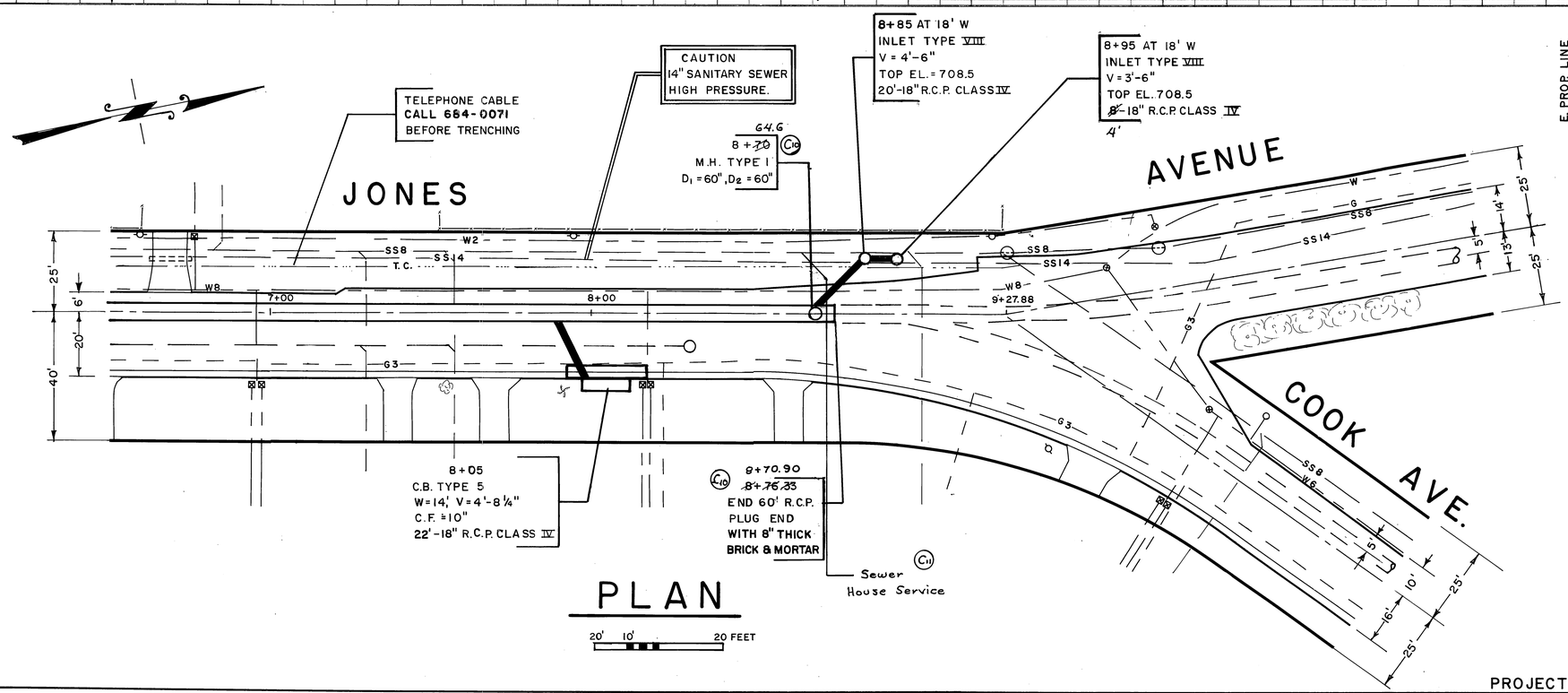
APPROVED: [signature] CHIEF ENGINEER R.E. NO. 5088
DATE: 3-22-68

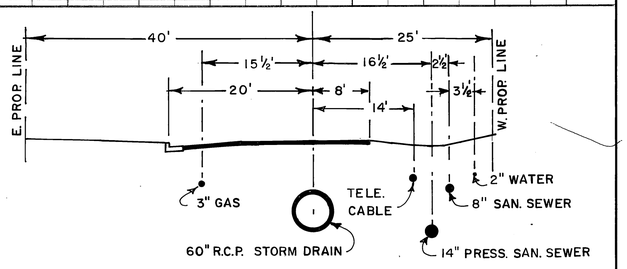
DRAWN: Jack Hanson
TRACED: Ken Bilodeau
CHECKED:
DATE DRAWN: June 1967

SHEET NO. 10 of 15
DWG. NO. 1-221

D-211







CROSS SECTION
STA. 8+00

10' 0 10 FEET

Reference	Description	Approved	Date
C10	Station & R.C.P. Changes	JCH	4-24-70
C11	Sewer Line	JCH	4-24-70

— REVISIONS —

Revised Date

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL
JONES AVENUE LATERAL
HOLE AND JONES AVENUE STORM DRAINS STAGE I

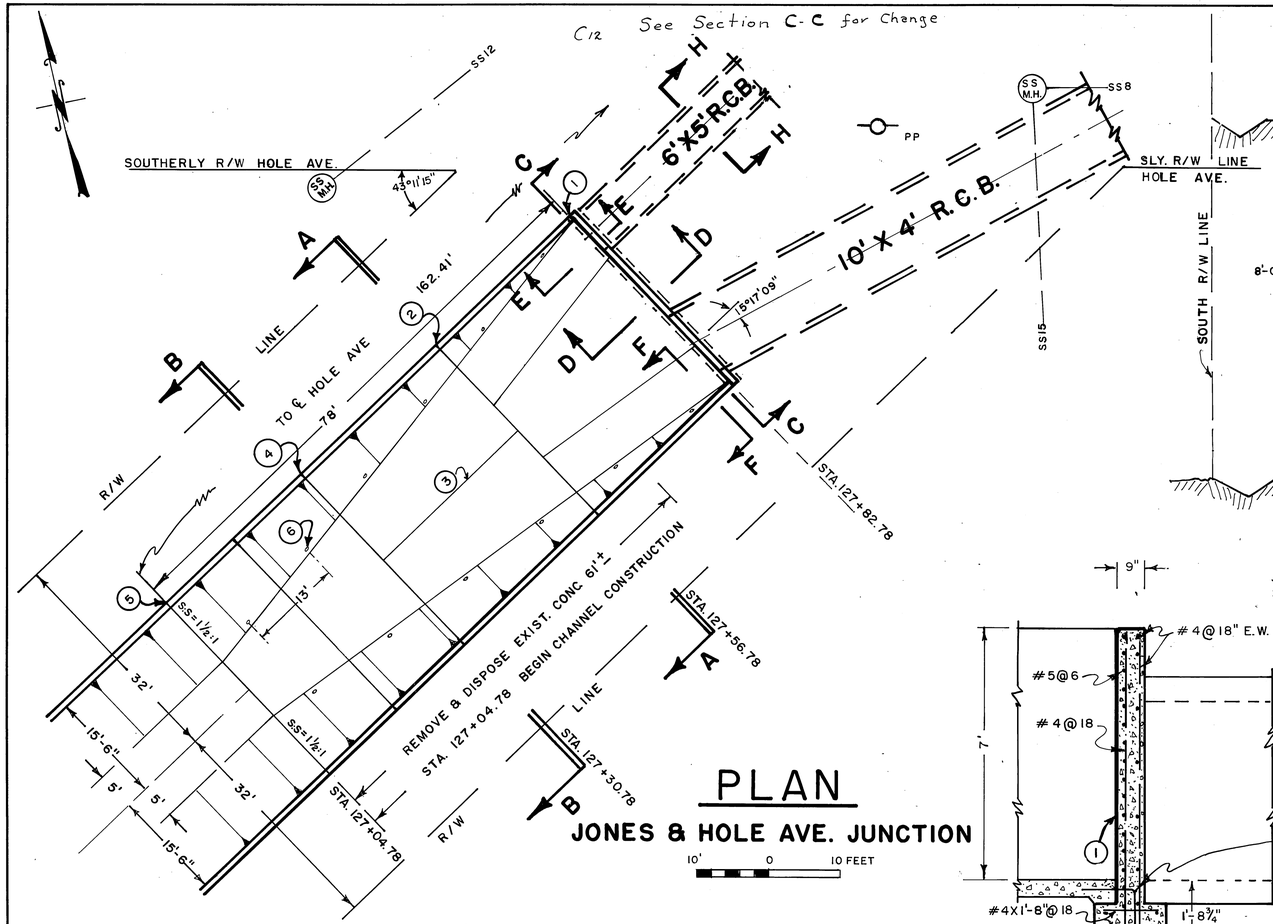
Approved: John B. Brunet, Chief Engineer R.E. No. 5822
Date: 3-22-68

Drawn: Jack Hanson
Traced: Ken Billadeau
Checked:
Date Drawn: June 1967

Sheet No. 11 of 15
Dwg. No. 1-221

PROJECT NO. 1-0-061
" AS BUILT "

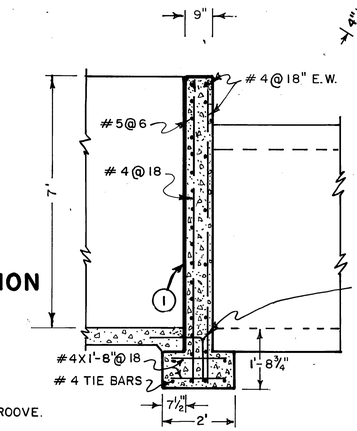
D-211



PLAN

JONES & HOLE AVE. JUNCTION

10' 0 10 FEET

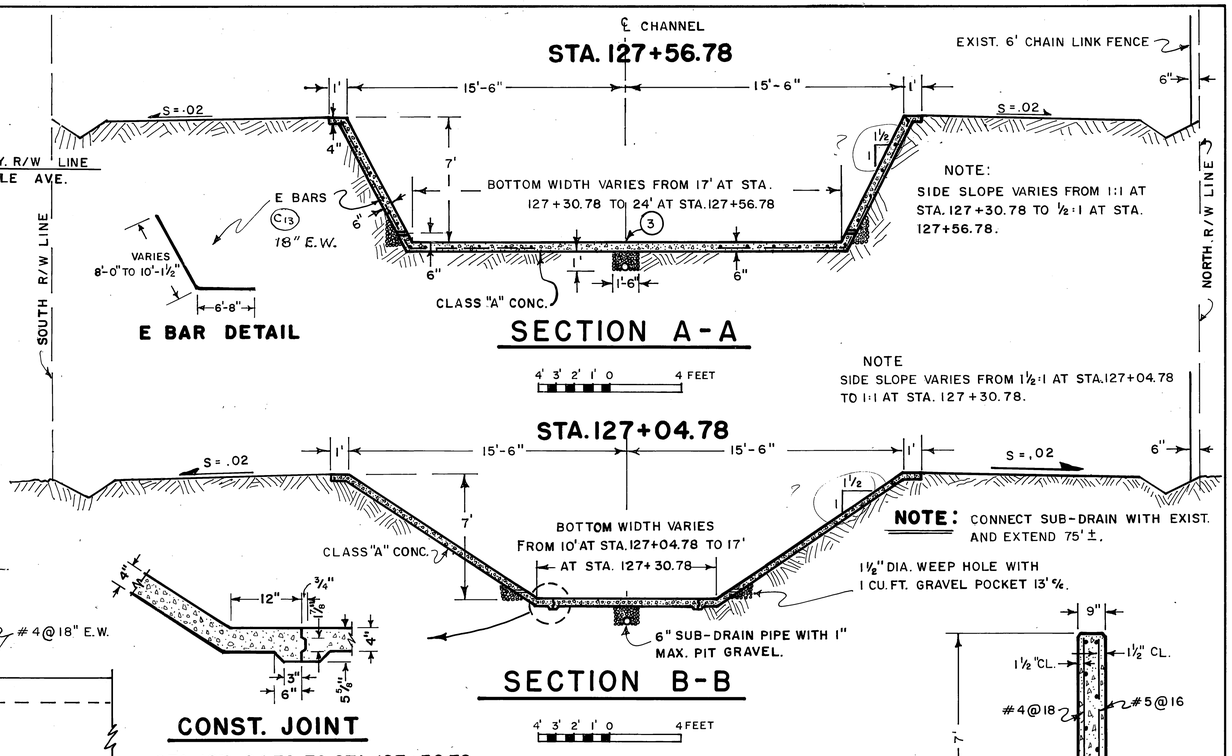


SECTION D-D

CONST. JOINT

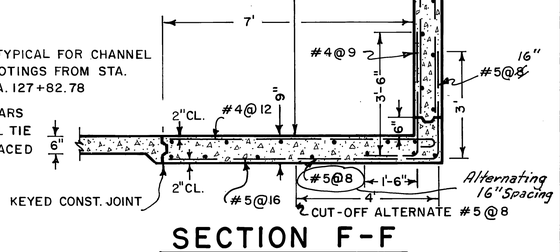
STA. 127+04.78 TO STA. 127+30.78

NOT TO SCALE



NOTE :

1. SECTION F-F IS TYPICAL FOR CHANNEL SIDEWALLS & FOOTINGS FROM STA. 127+56.78 TO STA. 127+82.78
2. LONGITUDINAL BARS ARE #4@18 ALL TIE BARS ARE #4 PLACED AS SHOWN.

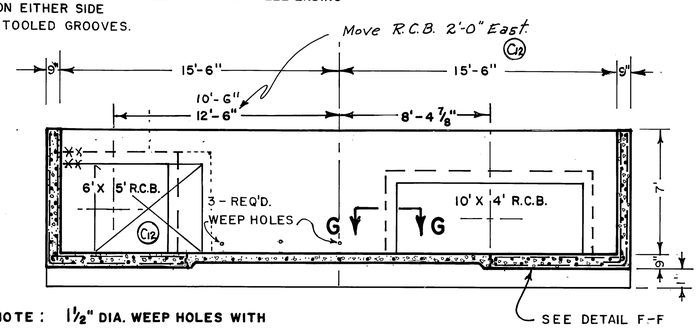


SECTION F-F

2' 1' 0 2 FEET

NOTES

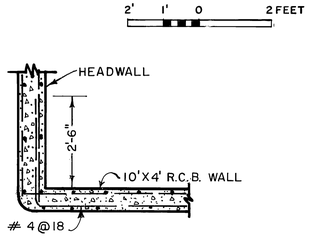
1. ½" EXPANSION JOINT MATERIAL & #4X3'@18 WITH CHANNEL END HEAVILY GREASED OR WRAPPED TO PREVENT BOND SHALL BE PLACED AT STA. 127+82.78
2. 1½" TOOLED GROOVE WITH LONGITUDINAL STEEL ENDING 2" ON EITHER SIDE
3. 1½" TOOLED GROOVES.
4. 1" TOOLED GROOVE WITH STEEL ENDING 2" FROM GROOVE.
5. 1" TOOLED GROOVE.
6. WEEP HOLES SEE SECT. B-B



NOTE : 1½" DIA. WEEP HOLES WITH 1 CU. FT. GRAVEL POCKETS

SECTION C-C

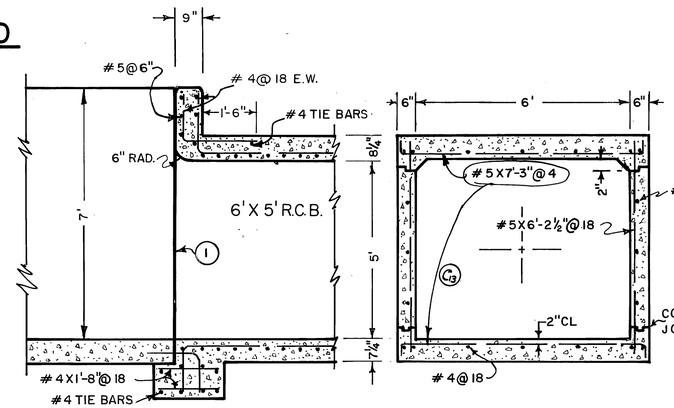
4' 3' 2' 1' 0 4 FEET



SECTION G-G

LONGITUDINAL #4@18 I.F OF R.C.B. WALLS SHALL BE EXTENDED 3' & BENT WHERE REQ'D. TO ANCHOR IN HEADWALL AS SHOWN.

NOT TO SCALE



SECTION E-E

2' 1' 0 2 FEET

SECTION H-H

Reference	Description	Approved	Date
C12	Relocate R.C.B.	JCV	4-24-70
C13	Rebar demensions & Spacing	JCV	4-24-70

— REVISIONS —

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL

JONES AVENUE LATERAL

HOLE AND JONES AVENUE STORM DRAINS STAGE I

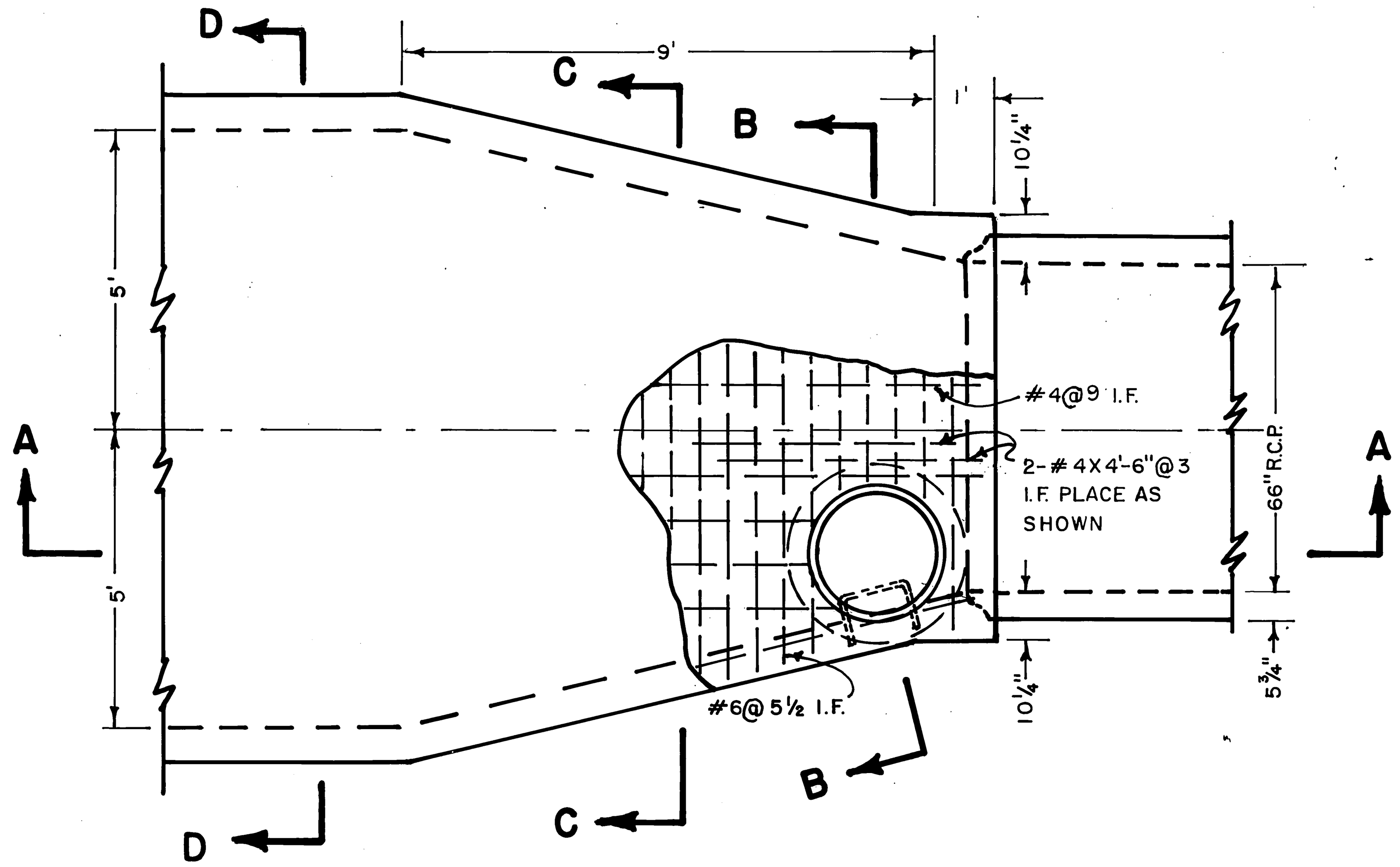
Approved: John W. Bryant, Chief Engineer R.E. No. 0882
Date: 5-22-68

Drawn: Jack Hanson
Traced: Ken Bilodeau
Checked:
Date Drawn: June 1967

Sheet No. 12 of 15
Dwg. No. 1-221

PROJECT NO. 1-0-061
"AS BUILT"

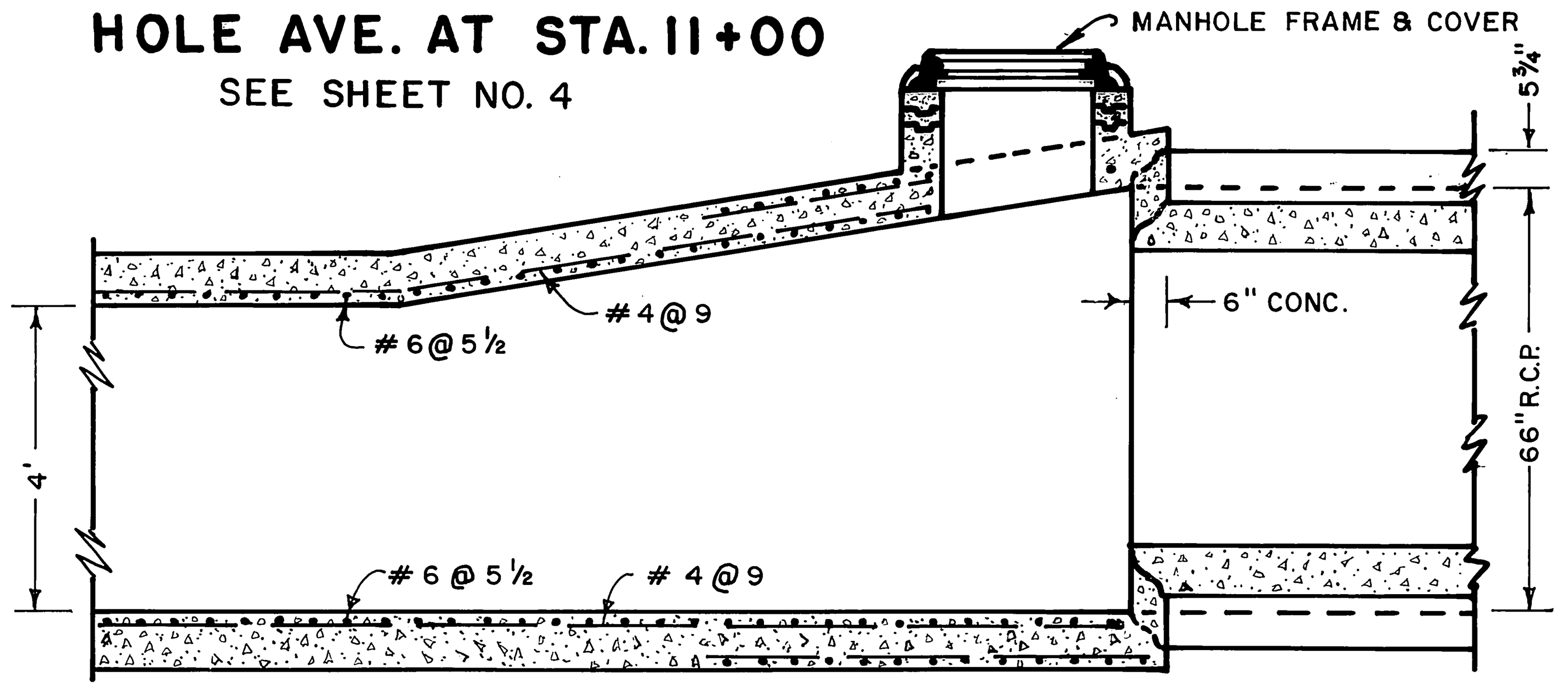
D-211



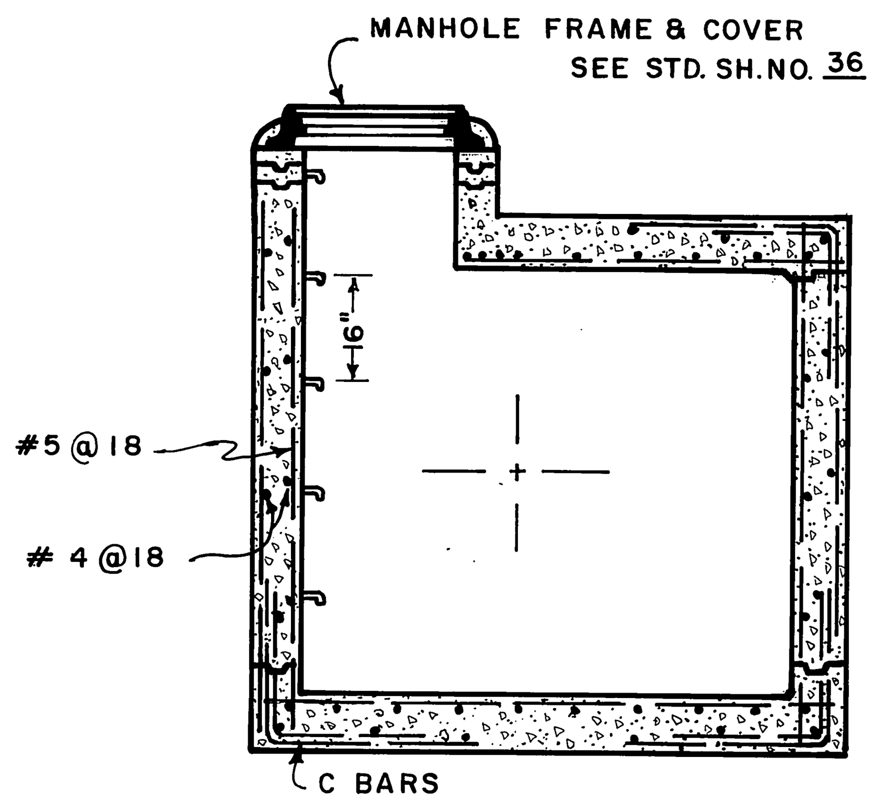
PLAN

TRANSITION STRUCTURE ON HOLE AVE. AT STA. 11+00

SEE SHEET NO. 4



SECTION A-A



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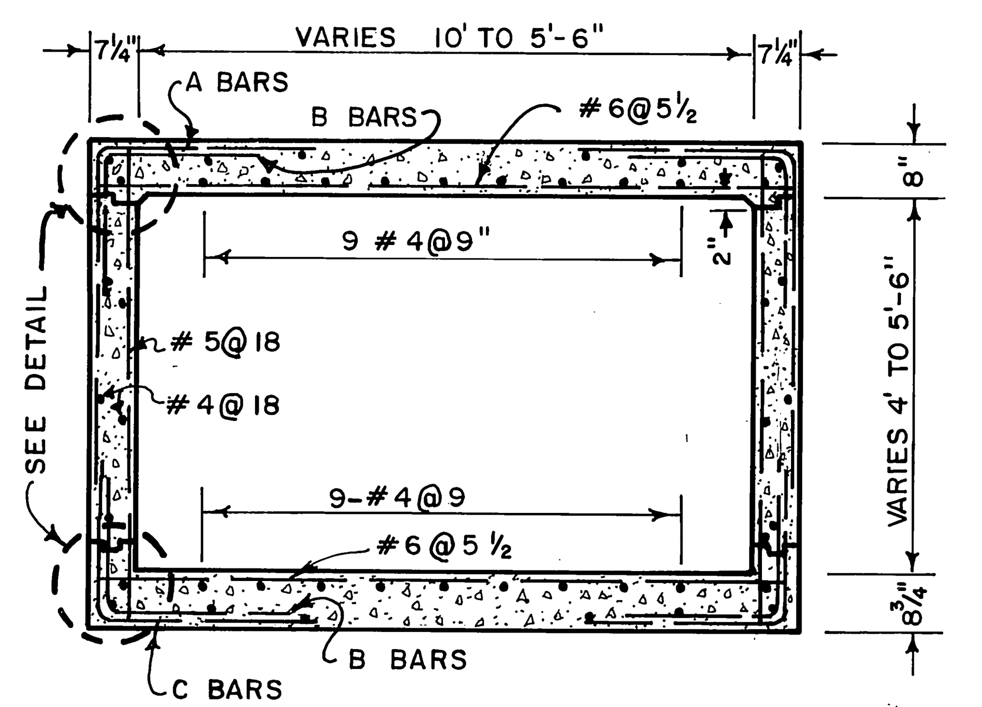
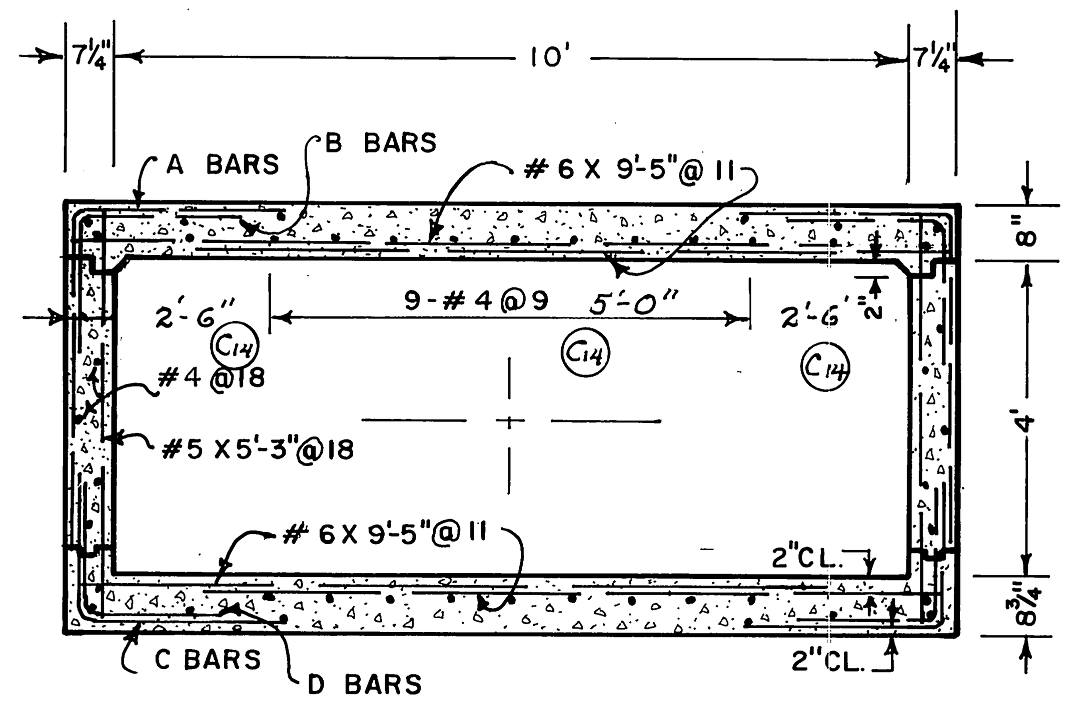


SECTION C-C



SECTION D-D

NOTE

R.C.B. REINFORCING SHALL HAVE 1½" CLEAR COVER EXCEPT BOTTOM SLAB AS NOTED.

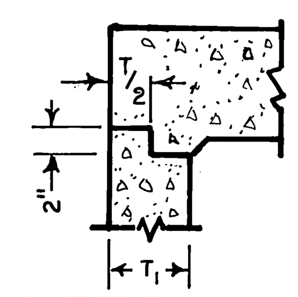
TYPICAL SCALE

2' 1' 0 2 FEET

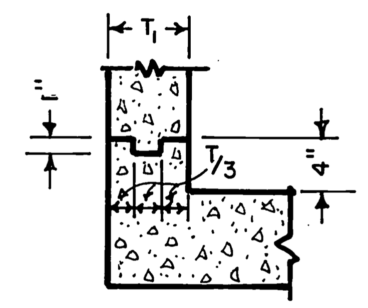
R.C.B. REINFORCING				
CODE	SKETCH	SIZE & SPACING	DIMENSIONS X	DIMENSIONS Y
A		#5 @ 11	2'-8"	4'-3"
B		#5 @ 11	2'-0"	1'-10"
C		#5 @ 11	2'-8"	2'-2¾"
D		#5 @ 11	2'-0"	1'-10"

NOTES

1. FOR DETAILS OF MANHOLE FRAME & COVER SEE SH. NO. 36.
2. FOR DETAILS OF MANHOLE SHAFT & STEPS SEE SH. NO. 35.
3. Y DIMENSION ON "A" BARS VARIES FROM 4'-3" TO 5'-3"



DETAIL OF TOP CONSTRUCTION JOINT



DETAIL OF BOTTOM CONST. JOINT

NO SCALE

STRUCTURAL NOTES

1. TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE PLACED WITHIN 30'OF MANHOLE OR JUNCTION STRUCTURE OPENINGS.
2. ALL CONSTRUCTION JOINTS IN THE BOTTOM SLAB, TOP SLAB AND SIDE WALLS SHALL BE IN THE SAME PLANE. NO STAGGERING OF JOINTS WILL BE PERMITTED.
3. AT TRANSVERSE CONSTRUCTION JOINTS BREAK LONITUDINAL STEEL & PLACE #4 @ 12 - 3' LONG WITH ONE END WRAPPED TO PREVENT BOND.
4. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, TRANSVERSE JOINT KEYWAYS (IN BOTH SLABS & WALLS) AS DETAILED FOR LONGITUDINAL KEYWAYS AT THE BASE OF WALLS, SHALL BE PLACED AT THE END OF EACH POUR; BUT THE SPACING THEREOF SHALL NOT EXCEED 50 FEET OR BE LESS THAN 10 FEET.
5. IN CURVED SECTIONS TRANSVERSE BARS SHALL BE PLACED RADIALLY. STRAIGHT TRANSVERSE BARS IN TOP AND BOTTOM SLABS SHALL BE SPACED AS SHOWN ON THE TYPICAL SECTIONS; SPACING SHALL BE AT THE CENTERLINE OF CONSTRUCTION. STRAIGHT BARS AND L-BARS IN WALLS SHALL BE SPACED AS SHOWN ON THE TYPICAL SECTIONS, WITH THE SPACING MEASURED BETWEEN THE VERTICAL LEGS OF BARS.
6. THE WALLS AND TOP SLAB MAY BE POURED MONOLITHIC, ~~BUT AFTER WALLS HAVE BEEN POURED, A DELAY OF NOT LESS THAN 2 HOURS SHALL BE MADE BEFORE POURING OF THE TOP SLAB IS STARTED.~~ (C15)
7. AT THE BEGINNING AND ENDING OF ALL POURS, A LAYER OF REINFORCEMENT SHALL BE PLACED 3" FROM THE TRANSVERSE CONSTRUCTION JOINT.

REFERENCE	DESCRIPTION	APPROVED	DATE
C14	Missing dimensions		4-24-70
C15	Specifications Not Used		4-24-70

— REVISIONS —

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL

JONES AVENUE LATERAL

HOLE AND JONES AVENUE STORM DRAINS STAGE I

APPROVED: CHIEF ENGINEER R.E. NO. 9832

DATE: 3-22-68

DRAWN: Jack Hanson
TRACED: Ken Bilodeau
CHECKED:
DATE DRAWN: Sept. 1967

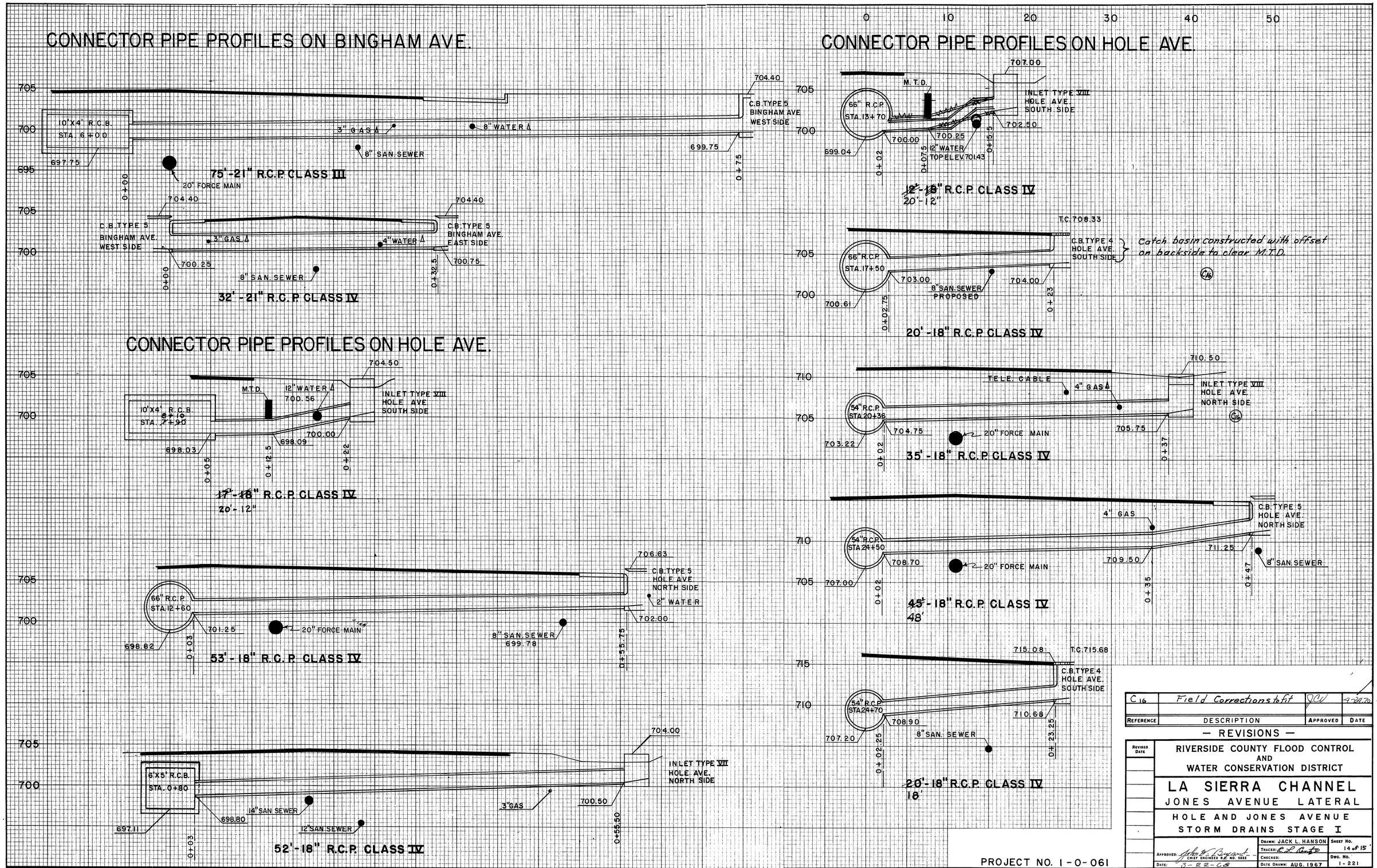
SHEET NO. 13 of 15

DWG. NO. 1-221

PROJECT NO. 1-0-061

"AS BUILT"

D-211



C16	Field Corrections to fit	JCV	4-24-70
REFERENCE	DESCRIPTION	APPROVED	DATE

— REVISIONS —

REVISED DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL
JONES AVENUE LATERAL

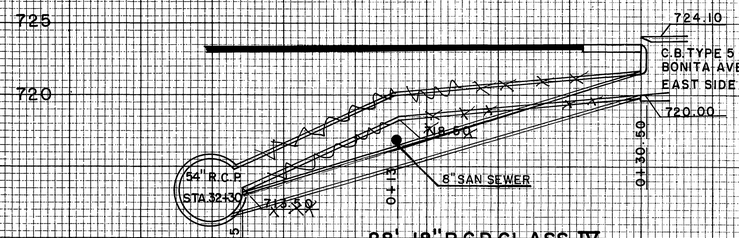
HOLE AND JONES AVENUE STORM DRAINS STAGE I

APPROVED: John W. Bryant, CHIEF ENGINEER R.E. NO. 6822
DATE: 3-22-68
DRAWN: JACK L. HANSON
TRACED: C. L. Conte
CHECKED:
DATE DRAWN: AUG. 1967
SHEET NO. 14 of 15
DWG. NO. 1-221

PROJECT NO. 1-0-061
"AS BUILT"

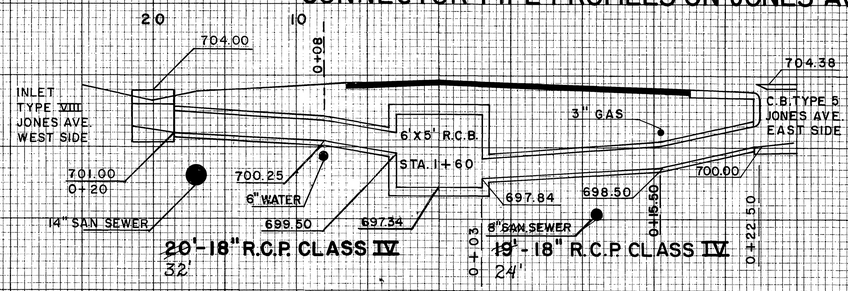
D-211

CONNECTOR PIPE PROFILES ON BONITA AVE.



28'-18" R.C.P CLASS IV

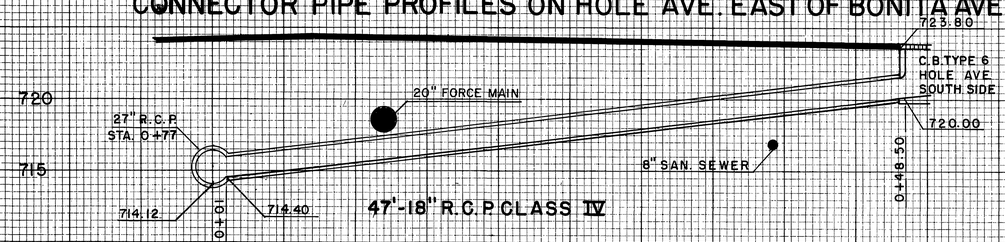
CONNECTOR PIPE PROFILES ON JONES AVE.



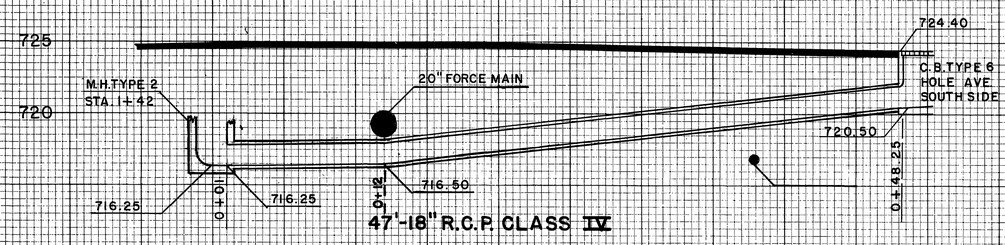
20'-18" R.C.P. CLASS IV
32'

19'-18" R.C.P CLASS IV
24'

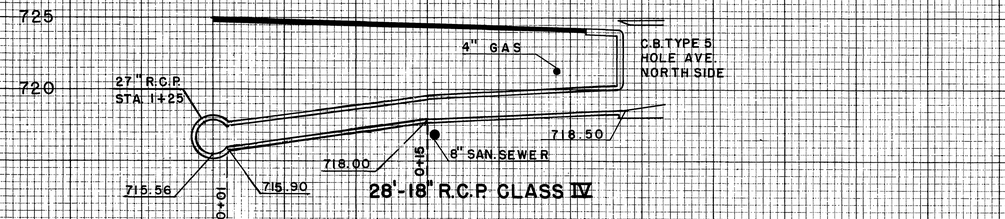
CONNECTOR PIPE PROFILES ON HOLE AVE. EAST OF BONITA AVE.



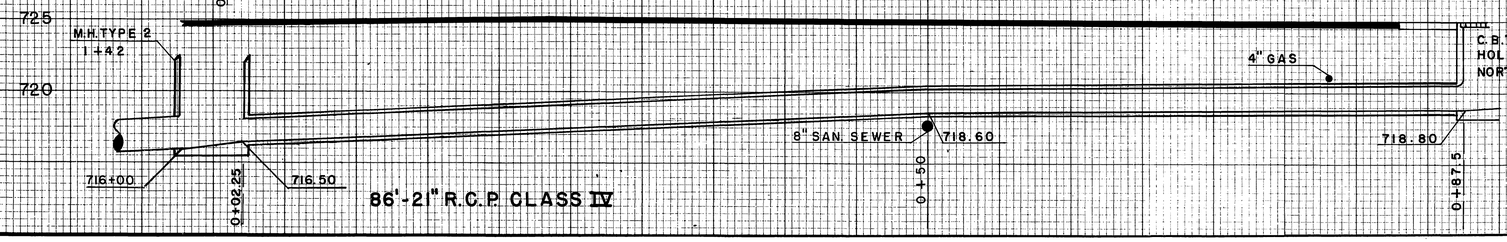
47'-18" R.C.P. CLASS IV



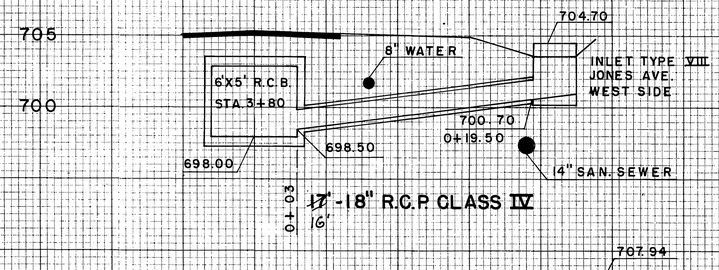
47'-18" R.C.P. CLASS IV



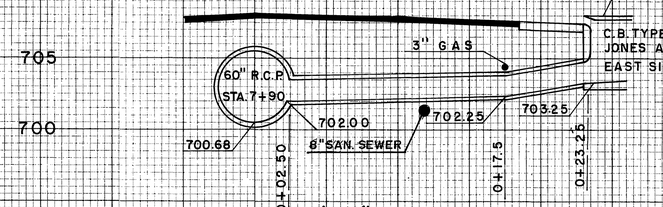
28'-18" R.C.P CLASS IV



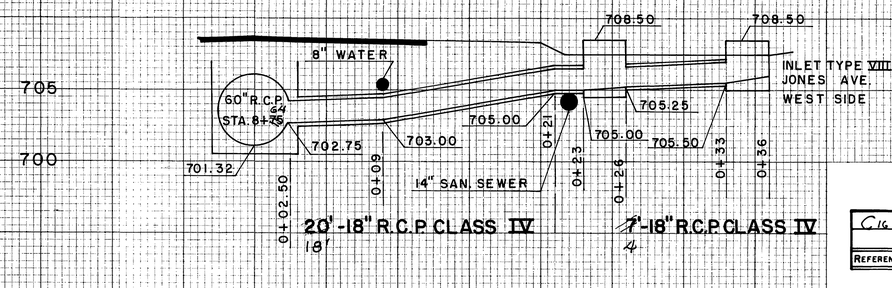
86'-21" R.C.P. CLASS IV



17'-18" R.C.P CLASS IV
16'



21'-18" R.C.P CLASS IV
20'



20'-18" R.C.P CLASS IV
18'

17'-18" R.C.P CLASS IV
4

C16	Field Corrections to fit	SDW	4-4-68
REFERENCE	DESCRIPTION	APPROVED	DATE

— REVISIONS —

REVISED DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

LA SIERRA CHANNEL
JONES AVENUE LATERAL
HOLE AND JONES AVENUE STORM DRAINS STAGE I

APPROVED: [signature] CHIEF ENGINEER R.E. NO. 5022
DATE: 3-22-68

DRAWN: JACK L. HANSON
TRACED: [signature]
CHECKED:
DATE DRAWN: AUG. 1967

SHEET NO. 15 of 15
DWG. NO. I-221

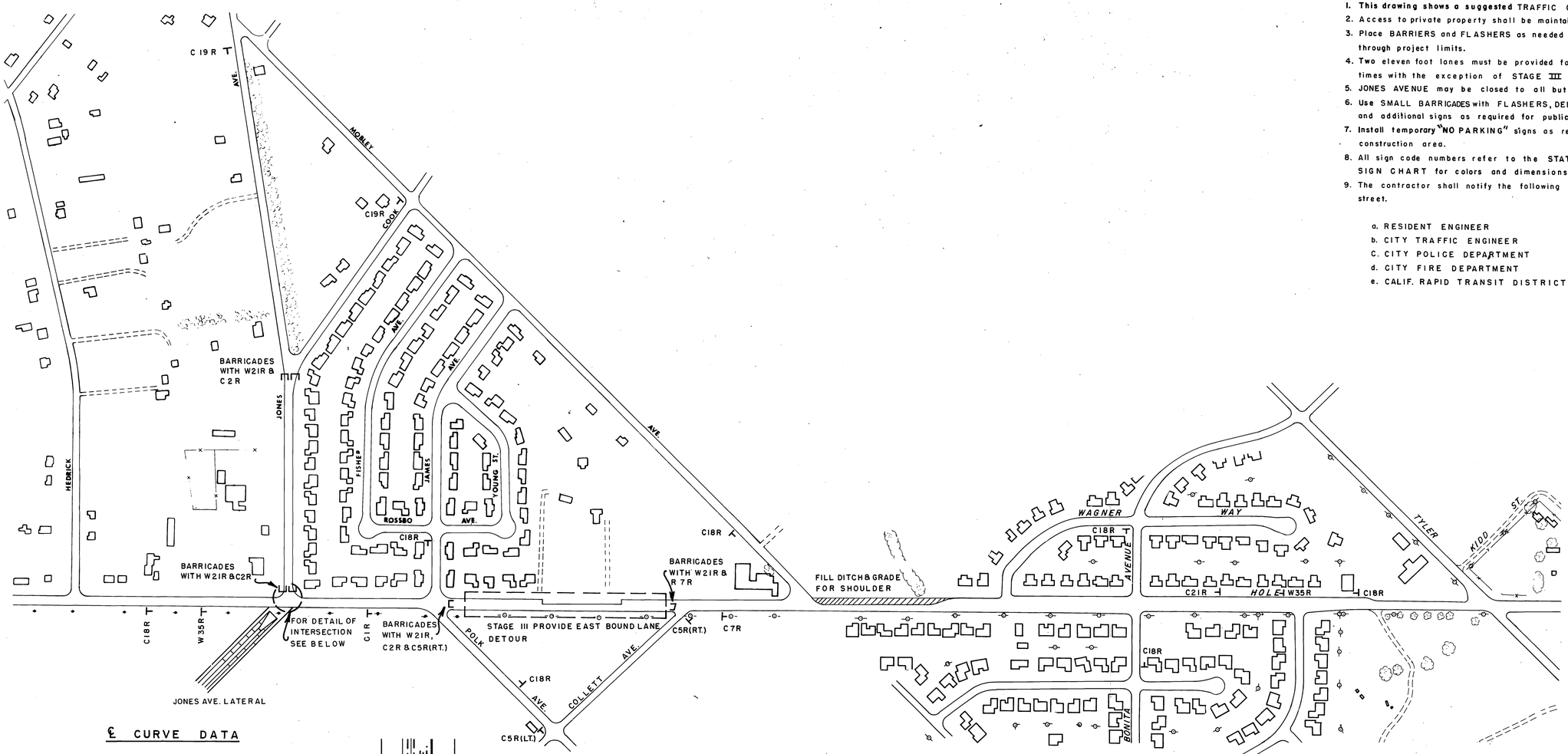
PROJECT NO. I-0-061
" AS BUILT "

D-211

GENERAL NOTES:

1. **This drawing shows a suggested** TRAFFIC CONTROL PLAN.
2. Access to private property shall be maintained at all times.
3. Place BARRIERS and FLASHERS as needed to protect against an open trench through project limits.
4. Two eleven foot lanes must be provided for traffic on HOLE AVE. at all times with the exception of STAGE III construction.
5. JONES AVENUE may be closed to all but local traffic.
6. Use SMALL BARRICADES with FLASHERS, DELINEATORS, REFLECTORIZED COLORS, and additional signs as required for public safty throughout the construction area
7. Install temporary "NO PARKING" signs as required for traffic movement through the construction area.
8. All sign code numbers refer to the STATE DIVISION of HIGHWAYS STANDARD SIGN CHART for colors and dimensions.
9. The contractor shall notify the following at least 48 hours prior to closing any street.

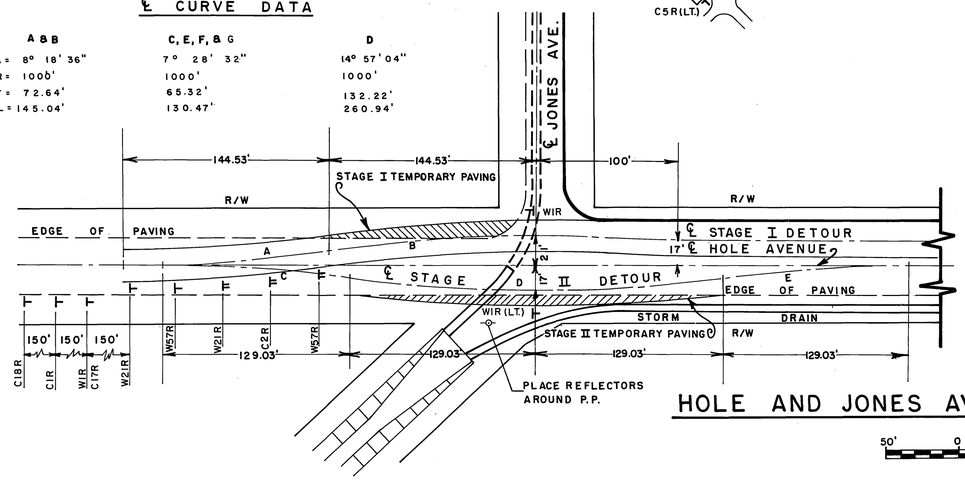
a. RESIDENT ENGINEER	787 - 2015
b. CITY TRAFFIC ENGINEER	787 - 7366
C. CITY POLICE DEPARTMENT	787 - 7011
d. CITY FIRE DEPARTMENT	787 - 7323
e. CALIF. RAPID TRANSIT DISTRICT	213-749 - 6977



Scale 1" = 200'

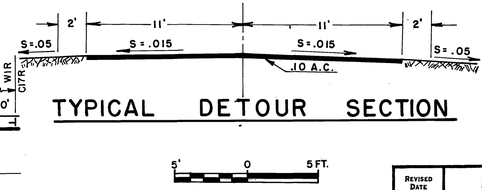
℄ CURVE DATA

A & B	C, E, F, & G	D
Δ = 8° 18' 36"	7° 28' 32"	14° 57' 04"
R = 1000'	1000'	1000'
T = 72.64'	65.32'	132.22'
L = 145.04'	130.47'	260.94'



HOLE AND JONES AVENUE INTERSECTION

50' 0 50FT.



TYPICAL DETOUR SECTION

5' 0 5FT.

REVISED DATE	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
	LA SIERRA CHANNEL
	JONES AVENUE LATERAL
	HOLE AND JONES AVENUE STORM DRAINS STAGE I
	DRAWN: D. ISBELL — SHEET No. 41
	TRACED: —
	APPROVED: CHIEF ENGINEER R.E. NO. 8822 — CHECKED:
	DATE: 3-22-68 — DATE DRAWN: AUG. 1967 — DWG. No. 1-221

PROJECT NO 1-0-061

D-211